REPORT

OF THE

PILGRIM COMMITTEE,

MADRAS.

1915.

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PRINTED AT THE GOVERNMENT MONOTYPE PRESS.
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REPORT OF THE PILGRIM COMMITTEE, MADRAS.

PART I.

Introductory.

This committee was appointed in accordance with the suggestion of the Government of India that a comprehensive enquiry should be conducted over the whole of India by the Sanitary Commissioner, assisted by local officers in each province, into the possibility of improving the sanitary arrangements at centres where pilgrims concentrate for worship with the special aim of reducing mortality from disease such as cholera. The members appointed for this Presidency are the following :—

PRESIDENT :

Lieutenant-Colonel W. W. Clemesha, I.M.S.,
Officiating Sanitary Commissioner with the Government of India.

MEMBERS :

Lieutenant-Colonel H. Thomson, I.M.S.,
Acting Sanitary Commissioner for Madras.

Mr. E. S. Lloyd, I.C.S.

The Hon'ble Rao Bahadur M. Ramchandra Rao Pantalu Garu,
Chairman, Municipality, Ellore.

Dr. H. W. McCaully Hayes, M.R.C.P., L.R.C.S.E., L.R.F.P. & S. (Glasgow), L.M., D.P.H. (Liv.), D.T.M.,
Chief Medical Officer, South Indian Railway.

Dr. A. I. Jackson, F.R.C.S., D.P.H.,
District Medical Officer, Madras and Southern Mahratta Railway.

Our instructions are that the scope of the enquiry should be as wide as possible including such questions as lodging-house accommodation, sanitary arrangements on railways and food and water-supplies.

Procedure.

2. Our method has been to write notes on the spot as regards the special features of each place visited, after discussion with the principal local residents. These notes form the second part of the report. The method necessarily involves a certain amount of repetition but has the advantage that no one except those concerned with the particular place need trouble himself with the local details. In the first part we deal with general matters and summarise our conclusions.

Our report would have been fuller and doubtless of more value had we been able to be present at some of the large festivals. The time of the year at which it was undertaken, did not however permit of this and we regret that we have been compelled on certain important points to depend largely on hearsay when personal experience would have been more convincing.

Effect of railways on pilgrim traffic.

3. The extention of railways has profoundly affected pilgrimage traffic in Madras as in other parts of India. Formerly a pilgrimage meant a difficult and often a dangerous journey by road. Pilgrims were often months on the way and provision of halting places on the route and accommodation for rest and food in the villages was a matter of much importance and was largely met in Madras by the erection of choultries where pilgrims could sleep and cook their food and where they were often fed by the charitable. In recent years there has been a change. A large proportion of the traffic is now conducted by rail and it is not uncommon for a particular person or group of persons to make a round of the more sacred temples, to visit Rameswaram and to return to his or their houses in some remote part of India within a few weeks, or even days, from the moment of starting forth. This naturally alters the position ; on the one hand the danger of

the rapid spread of disease from one centre to another is considerably enhanced : on the other the conditions under which the pilgrimage is undertaken are less severe and therefore less inimical to health. The extension of railway communication, especially to such a place as Rameswaram, also seems to have a result which has a direct bearing on our enquiry, a result which might at first sight seem to be unexpected. This is in the way of making the actual festivals themselves, if anything, less, rather than more, largely attended. Pilgrims no doubt prefer to make their visit to the shrine if possible at the date of the festival, but many also come at other seasons. Traffic, therefore, has extended more equally throughout the year and while special care no doubt has to be taken at festival times, it is becoming more important that good accommodation, pure water-supply and adequate conservancy should be provided in the temple towns not only during festivals but permanently. A still further result has been that the choultries in the villages *en route* are less used and have in numerous instances fallen into disrepair, while housing accommodation at the temple centres themselves and at important junctions is becoming more and more needed.

Railway accommodation.

4. Provision of suitable accommodation on the railway being of great importance to the pilgrims, it is fitting that we should deal with this subject first and record our impressions as to how far the arrangements made for conducting them to their destination, for their rapid clearance when a festival is over and for their comfort on the journey to and fro are suitable and in what ways they seem open to improvement. We have made a very careful study of the South Indian Railway arrangements in particular, this being the line which has the greatest pilgrim traffic in Madras and that on which the majority of our tour has been spent, and on the whole we find much to admire and but little which we consider can fairly be criticised. The South Indian Railway suffers from the severe initial disadvantage of being only a single metre gauge line running through a very populous country. Passenger traffic is heavy at all times of the year : in festival seasons it naturally and unavoidably tends to become unpleasantly congested. The Railway authorities, however, make a special study of provision for pilgrim traffic, they have during recent years considerably improved their rolling stock, and while we should not wish to be construed as thinking that the ideal has been reached—far from it—and while in several instances we consider that more special trains should be run and for longer distances, especially immediately after a festival, we are still content to acknowledge that the company really know their own business better than we can teach it to them and have considered and are considering all feasible means by which festival traffic can be improved.

While, therefore, we have a few recommendations to make and have not hesitated to point out what we consider desirable improvements at various stations, our general attitude is one rather of wonder that so much has been successfully accomplished than of caustic criticism of minor defects.

We believe moreover that the general public on the whole share our appreciation of the efforts of the Railway authorities to study their convenience and comfort. Human nature being what it is, it is not to be expected that there should be an absence of grumbling. We have heard plenty of it during our travels. Some of it is no doubt reasonable enough : no one can be expected to like to be, say, one of 12 or 13 crowded into a compartment constructed to carry 8. Some of it, however, seems hardly fair. Persons accustomed to pass their life in the open air can, for instance, hardly expect a railway company to cover the whole of a long Indian platform to shelter them from the elements. Special attention to this matter should, however, we think, be given at large junctions. Even overcrowded trains are not a peculiarity of the South Indian Railway and the inconvenience thereby caused is not uncheerfully borne by holiday crowds here as in other parts of the world. The more sensible among the persons we have interviewed are, we believe, cognizant of this. The great uneducated throng undoubtedly much appreciate railway travelling and put up cheerfully with jostling and crowding. We have heard indeed that in many cases they insist on overcrowding, especially when travelling in family parties, or when the only choice is that of being left behind, and that the station staff are often powerless to prevent nearly double the

number of persons which a compartment can hold, forcing their way into it. Once in, no amount of persuasion or even force is effective in getting them out.

Overcrowding in trains.

5. As this matter of overcrowding is probably the chief complaint brought against the railway, and as it is of importance to see that pilgrims are not exposed to unnecessary discomfort, we have endeavoured, by taking a specific instance—that of the last Kartikai festival at Tiruvannamalai—to find out to what extent it really does occur. In this instance the festival began on the 20th November and people began to arrive in large numbers from about the 23rd: the Deepam day, the most important of the feast, fell on the 1st December, after which the crowd began to disperse. We were informed that about 100,000 pilgrims attended the festival, about 40,000 of whom came by rail. The statement supplied to us by the District Traffic Superintendent shows the following figures :—

	Inward Traffic.				Outward Traffic.		
Date.	No. of trains run.	Total seating accommodation, III class.	No. of passengers travelled.	Date.	No. of trains run.	Total seating accommodation, III class.	No. of passengers travelled.
November.				November.			
22nd	7	2,688	770	28th	11	5,184	1,975
23rd	7	2,976	1,394	29th	7	3,776	1,152
24th	7	3,328	1,700	30th	9	4,448	712
25th	8	4,160	3,166	December.			
26th	11	6,080	8,607	1st	13	6,112	3,018
27th	11	5,088	7,855	2nd	12	5,664	5,152
28th	10	5,184	3,932	3rd	14	6,528	5,218
29th	8	4,096	3,860	4th	8	3,712	2,398
30th	12	5,888	6,710	5th	7	2,848	1,705
December.				6th	7	2,272	865
1st	13	6,240	2,729	7th	7	2,368	916
				8th	7	2,464	797
Total ..	94	45,728	40,723	9th	7	2,400	710
				10th	7	2,624	656
				11th	7	2,144	499
				Total ..	123	52,544	25,773
					Return	Tickets	17,820
						Total	43,593

The average daily traffic on ordinary occasions is said to be 608 and it did not much exceed the ordinary till the 23rd November and became again fairly normal after the 7th December. What we wish to ascertain is whether on any occasion during the festival the number of persons travelling on a particular day much exceeded the seating accommodation, and especially whether the accommodation provided in departure trains, let us say from the 1st to 5th December (by which time practically all pilgrims must have left), was or was not sufficient to clear the inward traffic from November 22nd to December 1st. As regards the first question it is obvious from the railway figures that the incoming passengers must have been to some extent inconvenienced on the 26th and 27th November when the

accommodation admittedly was not up to the demand. It may, however, be mentioned that the figure for seating accommodation is taken on an average of 57 seats to a " bogie " and many of the South Indian bogie carriages are said to carry 80.

As regards the second question it must be noted that holders of return tickets are not included in the column of " Number of passengers travelled " and as all or almost all of them presumably returned between the 1st and 5th December we think the total of returns 17,820 may safely be added to the number of persons who travelled on these days. Worked out in this way the accommodation and the numbers travelling compare as follows :—

——	Accommodation.	Number of passengers travelled.
December 1st	6,112	3,018
" 2nd	5,664	5,152
" 3rd	6,528	5,218
" 4th	3,712	2,398
" 5th	2,848	1,705
	Plus returns	17,820
	24,864	35,311

If these figures can be taken as even approximately accurate they certainly show very considerable overcrowding, and we think they are probably not an unfair sample of what may be expected to occur at other festivals. The important point, however, is whether the overcrowding is so excessive as to constitute a scandal. This we are disposed to doubt. It must be noted that in this particular instance the traffic is that of a branch line. A fair proportion of the passengers probably came from no great distance and we were assured by the Railway authorities that those going through found no special difficulty in securing accommodation on the main trains from the junction, although we have heard assertions from some members of the public to the contrary. It must also be remembered that the ordinary seating accommodation in a South Indian Railway 3rd class compartment is eight. This gives plenty of room and on a special occasion and for a short distance there seems no great hardship in as many as 12 getting into such a compartment. By squeezing up a little we have ourselves seen that it is just possible for so many as 12 to sit down. This is what pretty obviously happens. The Railway Company packs its trains on such occasions as full as they can possibly hold and it is only when passengers are found actually standing that they are made to get out and wait for another train. We do not wish to place any great reliance on exact figures —the number of persons travelling on any particular train is, we understand, somewhat roughly computed. All we feel ourselves entitled to infer is that there is undoubtedly great crowding at festival seasons and that it is permissible to express a hope that the railway will continue to make every effort to diminish it as much as possible.

In this matter of the provision of sufficient rolling stock Government, as practical owners of the line, have of course a very great responsibility, and we think it is incumbent upon us to bring to notice the fact that a widespread feeling undoubtedly exists that this duty is not altogether satisfactorily discharged ; that the Southern Railways do not always receive the same consideration as those in the North ; and that their wants are not so fully met as they deserve and as they have a right to expect. Overcrowding on the Southern Indian Railways is certainly a genuine grievance and is by no means only confined to festival periods.

Conveyance of pilgrims in goods-wagons.

6. The insanitary and undesirable practice of conveying pilgrims in goods-wagons has, we understand, been almost entirely abandoned on the South Indian line. In the north of India we learn that it is the custom for pilgrim specials to be

made up wholly or almost wholly of these vehicles. The hardships thereby caused are, we understand, extreme: overcrowding is frequently excessive; passengers are so tightly squeezed together that they cannot get out to obtain food and water or to answer the calls of nature, and we even hear of horrible stories of some one of the passengers becoming afflicted with cholera and the others not being able to avoid contact with him or to prevent their clothing and belongings becoming grossly contaminated with his dejecta. When it is remembered that the period of transit is often long, and that the journey is often performed at the hottest season of the year, the horrors of such confinement must frequently be well-nigh unbearable. Fortunately we consider ourselves justified in finding that such discomforts are almost unheard of in the south of India. The use of goods-wagons, though not absolutely prohibited by the regulations (we think they should be, except possibly upon such an extra special occasion as the Mahamakam) is yet so rare as to call for comment and explanation when it does occur. At Madura we were informed that the last time they could be remembered to have been employed was during His Excellency the Viceroy's visit in 1913. At Tiruvannamalai alone did we get an express statement that pilgrims were seen in them during the festival of 1914 and this was only asserted as regards ordinary trains and curiously enough was only said to have taken place with regard to passengers coming in and not, as might have been expected, those going out. We received an emphatic statement from the Traffic Superintendent that such wagons are never used in pilgrim specials for the annual feasts. Unfortunately he was not himself present at the 1914 festival: neither was the present station master. He was, however, distinctly surprised at the evidence given and since our departure from Tiruvannamalai he informs us that he has looked up the guards' reports of the trains for the period of the festival in question and is from them able to inform us definitely that on this occasion goods-wagons were not used on any train.

Waiting sheds.

7. At all the main pilgrim centres covered sheds have been constructed to accommodate pilgrims; these are provided with special booking offices, are divided into pens to separate passengers going in different directions, and are usually so constructed that while open to the outside they can be closed against the platform till the train comes in. These sheds are so popular that we consider the policy should be to increase their number and extend their size wherever possible. Madura is a case in point and we have made a recommendation to that effect in our notes regarding that station. Katpadi is another instance and very special attention should, we think, be paid to all junction stations.

Booking offices.

8. Providing oneself with a railway ticket, to the western mind, seems a simple thing enough; yet we have reason to believe that it is to the pilgrim by no means so easy a process as might be thought. The crowd round the booking office even on the occasion of the departure of an ordinary train is dense in a big station, clerks are often slow, and the window, in some cases at least, is believed to be not opened sufficiently early before the train comes in. For much of the jostling that takes place the people themselves are responsible. The ordinary Indian traveller has little idea of the advantage of forming up in line and of taking his turn. Passengers force themselves in from either direction and there is much hubbub and little order or method about the business. Various ways have been examined by us as to how this necessary preliminary to travel could be facilitated. The most common suggestion is that on the occasion of big festivals it would be a good thing for outside booking offices to be temporarily opened near the temple or the camp. We understand that this has been tried in one or two places and found not to be an unqualified success; the chief reason given being that the distance from the station makes supervision by the superior staff impossible. Another suggestion, which at first sight seems attractive, is that an open counter should take the place of the window system. This also, we are informed, has been tried and given up, as the booking clerks were found to be in great danger of being rushed and having tickets snatched away from them without payment. At some of the bigger stations notices are put up stating that booking is permitted throughout the day. We have received complaints that this rule is more honoured in the breach than the observance, but are assured that even if the window is closed there is always some one within, and it is possible to secure attendance if desired. One of the best ways to prevent inconvenience is, no doubt, the encouragement of the practice of taking return tickets.

This, we are glad to learn, is becoming more common and in one case in which we made special enquiries we found that approximately one-third of the total attendance at a festival had provided themselves with returns. On this subject we have therefore no very novel recommendation to make to the company : but we think that all and each of the methods above mentioned should receive further trial and that, with continuous booking at the main office, extra windows and possibly counters for the waiting sheds, outside offices, and encouragement to make use of return tickets, most of the possible ways of making the process as easy as possible have been enumerated. We may, however, mention a request made to us at Negapatam, *viz.*, that separate booking offices for women should be opened at some of the important stations. We doubt whether women often travel by themselves especially on the occasion of festivals, but there would probably be little difficulty in making an experiment and, if it should prove successful, the system might be extended and might even be accompanied by the introduction of female booking clerks. Such clerks, we understand, are employed in Calcutta and are found to be quick and honest.

Food supply on railways.

9. We approach this difficult and contentious subject with diffidence. The traveller in every part of the world is apt to be outspoken and possibly somewhat captious when the question of catering comes under debate. In India and for the Indian traveller particularly, the problem of how to supply cheap and reasonably wholesome food on the railways is extremely difficult. The South Indian Railway Company have made several laudable attempts to satisfy their Indian clients. From what we have heard they do not appear to have altogether succeeded, but it is better first to mention what has been done. To some of the through trains are attached Indian refreshment cars in which food is obtainable: this is a great advance, but has little to do with pilgrims in particular. At the principal junctions there are Indian refreshment rooms where meals are supplied in addition to the fruit and light refreshment stalls which are common almost everywhere. We have looked into several of these places. While we think that most of them are susceptible of considerable improvement and that some (we would mention that at Trichinopoly junction in particular) are distinctly bad, we doubt if they altogether deserve the abuse to which they are often subjected when the matter comes under discussion. It should be remembered that these refreshment rooms are a comparatively recent innovation, and when we are told that no self-respecting person will go into them, and they that are only used by 3rd class passengers, we reflect that, after all, the 3rd class passenger is in the great majority on the railway and that his needs should receive the first attention. One of the great difficulties before the Railway no doubt is that the space available on their platforms is limited, that the Indian admittedly does not like to be overlooked when taking his food, and that it is necessary to provide separate accommodation for different castes, many of which are not overcleanly in their habits. It is not therefore surprising that we not uncommonly find these rooms dark, confined, dirty and evil smelling. Better and separate accommodations for 1st and 2nd class Indian passengers is however greatly to be desired and we believe, that if it could be supplied more on the scale allowed for European passengers, the rooms would be largely patronized and that there would be no objection to the higher charges which would necessarily have to be imposed.

The refreshment room at Tanjore is generally mentioned as being the best on the line, though we hear it has recently been less well managed than formerly. The room at Mayavaram, a lately renovated and distinctly up-to-date station, seemed reasonably satisfactory. Most of the other places examined could hardly be described as first class.

The right to vend food on the railway was formerly let out to tenders. With the object, we believe, primarily of making sure that food is supplied in quantity and quality not inferior to that in the bazaars, this practice was abandoned, and the company gave up a considerable annual revenue derived from this source in order to obtain better control. All contracts are now entered into free ; a merely nominal deposit being required for good behaviour. It seems questionable whether the results obtained have been as successful as expected and it is open to doubt whether it would not be better to charge a monthly fee and

to have definite contracts with a clause allowing the deduction of fines for breach of their conditions. The great advantage of levying fees or charging rent would be to provide a fund out of which regular food inspectors could be financed. We have heard statements that inspectors are more trouble than they are worth and we believe, though formerly employed to some extent, they have been discontinued. Without some form of regular inspection we are, however, unable to see how there can be much control and how the management is likely to be improved.

We think moreover that it would probably be better if the general supervision of foodstuffs sold on the railway including the letting of contracts could be transferred from the Traffic to the Medical Department. Food does not seem to have much to do with traffic, and inspection should, we think, be entrusted to the department which is directly concerned with the health and sanitation. We understand that at present the Chief Medical Officer is able to do little even if complaints as to diluted milk or bad food come to his notice.

We made some inquiries as to whether it would not be possible to entrust the catering at Indian Refreshment Rooms over the whole line to one big firm in the same way as is done for Europeans. On the whole, opinion seemed to be against such an attempt and in favour of the local contractor.

Water-supply for passengers.

10. As far as we are able to judge the water-supply at most of the stations is reasonably adequate in quantity and satisfactory in quality. It is mostly derived from wells, the water being raised by a steam pump and distributed in hydrants on the platform. We think it would be as well if the Railway Company could have the water analysed systematically so that they may have exact information as to the quality of drinking water supplied to passengers. The staff of the King Institute could probably undertake the work. We do not approve of filters on the platforms and consider it is much better and safer to draw the water direct from the hydrants. The ordinary type of filter is likely to do much more harm than good and, we think, is only an item of unnecessary expense.

Conservancy en route.

11. Third class latrine accommodation is provided on corridor trains and latrines are placed on the platforms in sufficient quantities at all stations. Whatever precautions are taken to keep these as sanitary as possible they are almost invariably evil smelling and must be regarded as a considerable, if necessary, nuisance. Platform latrines are probably not much used by pi grims as they are anxious to leave the station immediately on arrival and are not allowed on the platform long before the departure of a train. It is more important that large and conveniently placed latrines should be situated outside the station either by the Railway or the Municipal authorities. We have made special reference to this matter in our notes on Madura. On the whole we consider that the sanitary arrangements in the carriages on the South Indian Railway are good. The carriages on the corridor trains are very airy and the latrine accommodation is as satisfactory as can perhaps be expected. We have, however, one suggestion to make which was made to us by the Chief Medical Officer. Latrines in third class carriages rapidly get fouled and it would be an advantage if two sweepers could be attached to each train to keep them clean. They should be provided with large drums of dilute antiseptic lotion for cleansing. The sweepers would also be of great value in reporting to the guard cases of serious illness occurring among the passengers. We consider that the scheme deserves a trial.

Medical.

12. The arrangements made by the South Indian Company to attend to cases of illness among passengers and to guard against the spread of infectious disease are, we consider, generally excellent. A note prepared by Doctor McCaully Hayes deals with the subject at length and as it is of importance that the provision made by the railway in this respect should be as widely known as possible: we give the note in full as an appendix to our report. We wish especially to draw attention to the care with which carriages are disinfected and to the salutary rule that all carriages in which a death has occurred should be treated as infected,

whether the death is actually due to an infectious disease or not. When it is remembered that nearly 20 millions of passengers are carried on this railway throughout the year, the fact that not more than 30 corpses are removed from trains during that period, and that the number of cases of illness of all description requiring attendance amongst passengers does not appear normally to exceed 100 per annum, must, we think, be accepted as proof that railway travelling in the south is not so dangerous to the public health as might possibly be imagined.

The Madras and Southern Mahratta Railway.

13. We proposed to confine our remarks on this railway to the small metre gauge line leading to Tirupati and Kalahasti as this was the only portion on which we travelled during our tour. This portion of the line was constructed for famine purposes and originally belonged to the South Indian. It would be invidious to institute comparisons between it and the broad gauge or with the richer South Indian line generally. We are bound, however, to state that the accommodation provided for pilgrims seems to be capable of much improvement. The waiting sheds are small and inadequate— the space provided at Tirupati East being in our opinion particularly cramped. The lighting at Renigunta and Katpadi junctions leaves something to be desired. The rolling stock is very poor. Pilgrims are admittedly still carried in goods-wagons, the reason given being that the number of passenger coaches is insufficient and that it does not pay to collect enough carriages from a distance in order to deal with the extra traffic occurring on only a few days in the year. We cannot think it right that pilgrims should be huddled together in goods-wagons: we understand that on the broad gauge they are not used, except on such occasions as the Pushkarams at Rajahmundry and Bezwada. We think their use should be prohibited also on the metre gauge line and that it is incumbent on Government, the predominant partner, to see that sufficient rolling stock is provided.

Accommodation for pilgrims at festival centres.

14. The accommodation available for pilgrims when they reach their destination must next be examined. We have dealt as fully as possible with this matter in the notes on the various places visited, but something must be said on the subject as a whole.

The south of India is on the whole well provided with charitable institutions for the accommodation of pilgrims. These are generally known as choultries, chatrams or matams; no very great distinction being made between these terms. The former rulers of Tanjore were especial benefactors in this respect and in most of the places we have visited we have had cause to admire also the splendid choultries erected in more recent times by the wealthy community of the Nattukottai Chetties. District Boards and Municipalities have also done something, though possibly not enough, to meet the need, and at the big festivals such as the Pushkarams and Mahamakam, temporary camps are also put up at the public expense. At many of the smaller annual feasts pilgrims who have no friends to go to, or who cannot afford to make special arrangements, sleep in mantapams or on pials or camp out in the open. As most of the festivals occur during the hot weather this is no very great hardship and we do not as a rule favour the idea that the provision of temporary camps is a necessity. Much, however, depends on the conditions of the particular place and on the season of the year at which the festivals are held and in some cases we have cause to think that more temporary, and in some places more permanent, shelters should be erected by Local Boards or Municipalities, assisted, if necessary, by provincial grants. The reports of the latest Pushkaram and Mahamakam feasts certainly show that on such occasions public camps are much appreciated and there is evidently need for more of them than have been provided in the past. In few, if any, of the places we have seen, are there many lodging-houses kept for profit, though in most the residents' houses are filled to overflowing at the festival seasons with relations, friends and sometimes with paying guests. The choultries and matams are everywhere the main form of accommodation.

Such places are frequently, though not always, regularly endowed and we think it is not travelling beyond the bounds of our subject, if we emphasize what we find to be the very general belief that charitable trusts should be brought under more effective control. We are aware that this is a much discussed subject, that the

line between charitable and religious endowments is finely drawn, and that Government have hitherto been reluctant to withdraw from the pronounced policy of non-interference with the direct management of anything approaching a religious institution. At the same time we remember that it has always been regarded as one of the duties of the State to see that charitable endowments, especially for the accommodation of travellers, are not diverted from their original object: Regulation VII of 1817 is still in force and the control of choultries is under it a definite part of the duties of the Board of Revenue and its local agents. The regulation is however long out of date and the powers of interference given by it are vague and inadequate. It is not, we think, strictly within our province to submit definite suggestions as to how the management of choultries should be more adequately supervised, even if we felt ourselves competent to do so, but we have paid much attention during our tour to these institutions and have endeavoured to sound public opinion on the question. It appears to us that they are generally well managed during the founder's life-time, and for one or two generations after, but we find that there is a very strong and widespread feeling that many of them after some time tend to be neglected and to fall into decay and that some form of public control would be very generally welcomed. As a preliminary step we think they should be compulsorily registered and that their funds should be subject to public audit.

At present in most districts there is, we find, no record of a tithe of these institutions. Statistical return L of the Taluq Manual is presumably meant to give such information. We have perused this return in several places and find that it is generally ignored and most inadequately filled up. In some cases it is practically restricted to a record of Municipal hospitals: in none have we found any complete list of the choultries, chatrams and matams in even the principal towns. We think far more attention should be paid to the subject. It is not of course possible, or we think even desirable, that the district officials should directly concern themselves with the actual details of management, nor do we think that Municipalities or Local Boards should generally be entrusted with the task. There does, however, seem to be a real need for an accurate record of the number and names of the various charities with some information as to the extent of the endowment and the object of the trust. That should, we think, be the first step. Exactly how far it would be advisable or possible to interfere in the matter of appointment of trustees is no doubt a very difficult question. Materials should, however, be made available by means of compulsory audit and publication of accounts for those responsible to know when an institution is being neglected and at what stage it should be taken over for public management. We think it possible that an official somewhat corresponding to the Registrar of Co-operative Societies might be appointed for this purpose. Some opinions have been expressed that control might be exercised through committees presided over by the district officials and consisting of non-official gentlemen interested in the subject. Whatever the eventual decision may be, what we are directly concerned with, is to point out that there is a general feeling that something wants doing and we think that the matter is of too great importance to be allowed to remain in its present unsatisfactory state.

There is, we think, clearly a need for more choultries at festival places and railway junctions. Many of the older choultries are situated in villages at which pilgrims, travelling by road were likely to halt. The advent of the railway has made these less necessary and has accentuated the need for others in more important places. We suggest, therefore, that the attention of the local authorities should be invited to the advantage of a systematic enquiry as to how far secular charities in their districts for which there are endowments are serving their purpose and whether they could not be diverted to meet the present requirements at pilgrim centres either in the same district or elsewhere. The original object of these charities can best, we think, be carried out in this way and we believe that Indian public opinion is greatly in favour of some action being taken in this direction. The Mangammal choultry at Madura was, we believe, constructed by a diversion of funds from another charitable institution in the same district and the same policy might be followed elsewhere. At Dindigul we were informed that the endowment of a choultry had been handed over to the Municipal Council to be utilised for a dispensary: we understand that the local feeling is in favour of its being reappropriated for a choultry which is badly wanted for pilgrims passing through that station to Palni.

15. There is another side of the question and one with which we are perhaps more particularly concerned and that is whether choultries, etc., should be subject to license by Municipalities or Taluq Boards with a view to seeing that due provision is made for sanitation and the public health. We have no hesitation in recommending this in the case of lodging-houses proper, but these, as we have seen, are few in the south of India. Whether or no a public or semi-public charitable institution should be made to pay a fee is possibly open to doubt, but whether the license is or is not granted free, we think it should be compulsory that it should be taken out. Conditions might perhaps vary in different places but should, we think, always include a limitation of the number of persons who should be allowed to occupy the building at any one time, and should be directed generally to securing cleanliness, sanitation and ventilation. We are also strongly of opinion that in all cases it should be incumbent on the manager to report immediately to a named authority any case of infectious illness occuring amongst the lodgers. This is one of the conditions of license for lodging-houses in the City of Madras and is, we think, of great importance. Nothing can be more prejudicial to the public health, or be more conducive to the spread of disease than what we believe to be a no uncommon occurrence—we mean an attack of cholera in a choultry and the leaving of the patient unsegregated and with little attendance among a festival crowd. We have heard in almost all places we have visited, of the little use to which cholera sheds are put and the difficulty of getting people to go to them. The remedy is partly to make these places more comfortable and to place them near the hospitals where the patient can receive adequate attention and nursing. It is also, we think, partly to make removal compulsory in cases where the person attacked is a stranger and cannot be given separate accommodation. It is not right that a cholera patient should be allowed to continue to occupy a crowded choultry. We shall have more to say on this subject when dealing with the prevention and treatment of cholera at festival places.

Licensing of choultries, chatrams and matams.

At present, as far as we have been able to ascertain, choultries are licensed only in Madura where they are considered to come under the heading of "public halting places." In the revision of the District Municipalities Act we understand that it is under prospect to mention them specifically as licensable and this is, we think, as it should be. Power, we further understand, will be taken under the Local Boards Act to extend to areas outside a Municipality such of the licensing provision of the District Municipalities Act as appear advisable. This seems very necessary. Such a choultry as that we have specially mentioned in our note on Daneskodi, for instance, should certainly be licensed.

Licensing of restaurants, coffee clubs, etc.

16. If licensing is necessary for choultries and lodging-houses it is even more desirable in the case of eating houses of whatever description. This is an admitted want in the present Act. In most towns coffee shops are brought under license as being places dealing in articles prepared from flour. Hotels and restaurants are not licensed. The pilgrim, when not charitably fed at the choultry or when he does not bring his own food with him and cooks it for himself, usually goes out to a hotel or restaurant for his meals. These places are almost without exception of very questionable cleanliness and should undoubtedly be brought under far stricter control. The need for legislation in this respect is, however, so widely realised that we think it unnecessary to do more than emphasize our strong opinion of its importance.

The effect of pilgrimages on general health.

We will now proceed to examine more closely the general question of the effect of pilgrimages on general health and under this head, it will be necessary to deal with the following diseases: cholera, plague, malaria, and small-pox. It will be better to mention the last three first as they are of secondary importance.

Small-pox.

18. Small-pox is a disease which, being very infectious, might easily be spread by religious festivals, for whenever the malady is prevalent it is always spread by traffic of all kinds; it is, however, in no way more likely to be carried by pilgrims than ordinary passengers. The infection of small-pox is air-borne, consequently it is practically impossible to prevent its being conveyed along lines of

communication. Of course such obvious measures as not allowing any one suffering from small-pox to travel in trains should be undertaken under any circumstances, but it is practically impossible to frame regulations that would adequately deal with the small-pox contact or with infected bedding, etc. The only measure that is really effective is to increase the efficiency of vaccination of the public as a whole. Experience in Madras shows that small-pox has very seldom resulted from the movement of people at religious festivals. We only came across one instance of this, namely, at Udipi in January 1914. The malady was there certainly introduced by pilgrims at the festival and spread throughout the town and the district. Recently, a serious epidemic broke out in the Kistna and Godavari districts which was probably imported down the East Coast railway from Bengal; it is possible that the disease was brought back from the November festival in Puri, but it is equally likely that it was brought by the ordinary traffic.

Malaria.

19. It is probable that a certain number of pilgrims may contract malaria on their journeys to and from a pilgrim centre, but as far as we can gather, there is no evidence that any particular centre is badly infected. On the other hand by far the majority of the places appear to be distinctly free from the disease. Rameswaram has recently become malarious and it will be necessary, as part of the general scheme of improvement of sanitation in the town, to take steps to remedy this. We are informed that the permanent inhabitants of Tirumalai suffer from fever a good deal; this may be due to the recurrence of fever due to climatic conditions rather than to reinfections. The matter does not appear to be serious at present. Should any religious centre become malarious, it should be visited by the Malaria Research Officer and a thorough investigation should be made into the conditions of affairs in order that appropriate measures may be adopted. It must be pointed out that in a crowd of pilgrims a certain proportion are sure to harbour parasites which hardship and exposure cause to be present in the blood. It is also well known that the worst types of malaria are common at places where the reservoir of parasites is constantly replenished from new sources.

Plague.

20. Plague is also a disease which theoretically might be spread by pilgrims. There are several reasons, however, which cause us to believe that, as a matter of fact, this is very rarely the case. In order to introduce plague it is necessary that plague-infected rats or rat fleas should be conveyed in bedding or in goods: it is only the pneumonic type which can be communicated directly by human beings. This being so it is unlikely that pilgrims can be a serious danger as they usually travel very light, bringing with them only just sufficient clothes and bedding for a few days' journey: it is obviously impossible that the rats could be conveyed in their small bundles and it is improbable that rat fleas would survive long in such environment. Pilgrims moreover on arrival mostly occupy choultries or temporary camps and many of them live in the open under trees. In none of these places would the rat population be large and if a small number of rat fleas were brought into the town the chances of harm would not be great.

About 400,000 pilgrims visit Tirupati every year and a considerable number of them—the Collector reckons about 30,000—come from plague-infected areas: yet the disease has never seriously attacked the town though some twelve imported cases have been detected during the last ten years. At the request of Government (Memorandum No. 429-T.P., dated 6th May 1915) the Committee have carefully examined the policy of prohibiting the attendance at festivals of pilgrims coming from plague-infected areas and have given some thought to what is known as the "notification system" which has superseded the old passport system. As regards the latter, we consider it of very doubtful utility particularly as applied to pilgrims: a large number certainly fail to deliver their notification forms to the local authority and nearly all contain insufficient addresses: this is hardly a matter for surprise as most pilgrims presumably do not know exactly where they are to stay on arriving at their destination. If the system is of doubtful advantage as regards pilgrims visiting a temple on non-festival occasions, it is of course even more difficult to trace them during a festival. This is no doubt one of the reasons why it is thought advisable to prohibit attendance of those coming from infected localities during a festival altogether.

Yet as we have seen the probable danger arising from their advent is small: the notification is often and easily evaded: the loss to the railways and the temples is considerable and the hardship caused when pilgrims have actually to be turned back is very great.

One of the most common means of evasion is for pilgrims who desire to attend a particular festival to time their arrival at the place just before the period of prohibition commences. The result of this is that they stay longer than they otherwise would and the danger, if any, caused by their presence is therefore proportionately increased. Another method is to re-book at a station *en route* which is plague-free. Even if they are actually turned back on arrival they do not necessarily go home but more frequently proceed to another temple place. We noticed this particularly at Renigunta where we had an opportunity of seeing the working of the existing arrangements, and where we were informed that many of the pilgrims who were stopped there on their way to Tirupati proceeded to Conjeevaram and thence booked back to Tirupati: the result of interference with their movements being thus to endanger two places instead of one.

The prohibtion against the issue of railway tickets further does not seem to be properly carried out. When we were at Renigunta the festival at Tirupati had been in operation for about a week and within that time we were informed that upwards of 900 tickets from plague-infected areas had been received and the pilgrims stopped. During our visit a party of eleven pilgrims arrived from Ahmedabad having booked from Raichur (both infected places) and were in consequence ordered to return. They complained that they had spent all the money necessary for a long double journey (no doubt to them a considerable sum) without a word of warning from anyone being given to them when they purchased tickets, and they were, we think, justly indignant at the treatment accorded to them.

On this subject we therefore come to the following conclusions :—

(1) That from a scientific point of view it is entirely unnecessary to stop pilgrims from infected areas attending a festival.

(2) That the regulations as at present framed, can be evaded and rendered quite useless with very little trouble on the part of the pilgrim.

(3) That their tendency is to spread pilgrims from infected areas over several places instead of collecting them all in one.

(4) That the sale of tickets at "infected" stations for prohibited festival stations is not in practice actually stopped, or at any rate not so thoroughly as it ought to be.

(5) That the prohibition of attendance at festivals thus causes much hardship and annoyance to the pilgrims and loss to the temple authorities and at the same time gives little, if any, protection to the Presidency.

(6) That the notification system is practically unworkable as regards pilgrims as they generally can give no fixed address and consequently cannot be traced.

We therefore recommend that pilgrims from infected areas should not be prohibited from attendance at festivals and consider that the notification system is too inefficient to produce any satisfactory results and might well be given up.

Cholera.

21. We have seen that small-pox, malaria and plague are affected only to a very small extent by pligrims and pilgrim traffic. We now come to the disease which is of extreme importance in connection with festivals, namely, cholera.

That pilgrim traffic may and does spread cholera infection need not be elaborated at great length in this report. It is bound to be so when one realises that the natural habitat of the virus is the alimentary canal of human beings. What, however, we have specially tried to elucidate is how far pilgrim traffic, as opposed to ordinary traffic, is responsible for the spread of the malady. Unfortunately we find this by no means an easy problem to solve.

In the first place we are bound to note that the investigation into the source of infection in cholera outbreaks throughout the whole Presidency is extremely

badly done and it is quite impossible for us to quote reliable figures showing to what proportion the pilgrim traffic in the Presidency is responsible for the spread of the disease. Later on it will be shown that cholera is spread by many agencies, and although pilgrim traffic is a factor, we have no means of ascertaining how large this factor is. On the whole we are inclined to hold that it is a comparatively small one. During the twelve months from June 1914 to May 1915 only twelve cases and six deaths from cholera were removed from trains on the two railways, *i.e.*, the South Indian, and the Madras and Southern Mahratta, and yet during the same period these two railways carried 39,338,000 and 35,240,000 passengers, respectively. This certainly supports the above contention and comparing these figures with those obtained in the north of India, the Committee feel justified in considering that pilgrims, particularly those travelling by railway, do not play a large part in the spread of cholera within the Presidency of Madras. In many of the pilgrim centres we visited we were frequently told that cholera was imported by pilgrims coming from some other festival. There can be little doubt that in many cases these reports were in substance correct: but we wish to point out that the records are so badly kept and the reports on the festivals are written in such an unsatisfactory manner by men often possessing only the educational qualifications of a Sanitary Inspector that little or no evidence exists in support of the various statements made in the reports. Many of the smaller festivals are not reported upon at all, and as an instance of the general unsatisfactory nature of such reports as exist, it may be stated that very few of them show whether a particular cholera patient was a pilgrim or a permanent resident in the town. The importance of this very vital piece of knowledge is obvious, for on it hangs the action that should be taken in order to prevent the spread of the malady. The Committee strongly recommend that the outbreaks of cholera throughout the whole Presidency should be much more carefully investigated as regards their origin and that much greater detail should be recorded in the registers of the medical officers, for without such accumulation of accurate knowledge remedial measures are only based on surmise.

The second point which the Committee wish to emphasize is that, from what we could gather in the short space of time at our disposal, the smaller festivals in out-of-the-way parts of the Presidency are to be regarded with much more suspicion as foci for the spread of the disease than the large ones. This is after all what one would expect. In many of the large festivals very careful and elaborate arrangements are made, as for instance at the Chitrai festival in Madura, still more on such occasions as the Mahamakham and the Pushkarams of the Godavari and Krishna. Everything that can possibly be done by vigilant and active officials is then done to render the spread of infection impossible, and given average luck in the way of suitable climatic conditions it is unusual for these big festivals to be a serious source of danger. We were struck with the great frequency of the remark that " it is no use your investigating the conditions here, but you ought to pay more attention to a small dirty place situated a few miles off." At every large pilgrim centre we have visited, particularly Rameswaram, Srirangam, Kumbakonam, Tirupati, and Conjeevaram, the same statement was made accompanied with the remark that much of the infection of the larger towns is actually derived from those places. The Committee endeavoured, as far as possible, to sift the truth of the statement, and, as far as we can judge, from the very inadequate figures placed at our disposal, we come to the conclusion that there is probably much truth in such remarks.

It would not be fair to the local authorities to say that these smaller places are altogether neglected, but it is certainly legitimate to state that conditions in them are certainly more favourable for the spread of cholera than in large places where better arrangements and a filtered water-supply exist.

The Committee therefore consider that the future policy of Government should be to greatly improve both the local conditions of these smaller places and to exercise greater vigilance over them than it is at present done during festivals.

Of course all places where the number of pilgrims is large must receive the greatest care and well-thought-out arrangements must be made early, but much of the good that will accrue from the careful supervision of these large festivals will be undone by neglecting a small and insanitary place in the immediate neighbourhood.

Another point which the Committee noticed in connection with the cholera returns was that a very large number of cases of the disease were reported in pilgrim centres during the non-festival season. In some instances there can be no doubt that infection was introduced into the place during a particular festival but did not make itself evident till after its conclusion. On the other hand, quite a fair proportion of the cases appear to have no connection with the festivals at all. In such cases the town itself is obviously in an insanitary condition and sanitation should be attended to quite independently of the fact that it is also a festival place. Negapatam is especially a case in point.

Within recent times a good deal of work has been done on the epidemiology of cholera which has to some extent changed our views in the method of spread. For the proper understanding of the cholera problem it is necessary to be thoroughly conversant with the various methods of communicating the disease ; hence a brief description of these will be required at this point. It is well known that cholera is caused by a small vibrio which is always found in the fœces and vomited matter of the patient : it is not infrequently found in contaminated water, but never in uncontaminated; hence it follows that before a healthy person is attacked, the vibrios, which originally come from a patient or carrier, must be ingested by another individual; this of course is usually done by means of food and water. The various ways in which the poison is passed from man to man are—

(1) *By personal contact.*—By this we mean that an infected person can, and not infrequently does, pass the infection on to somebody with whom he is living in close relationship. Thus, it is not unusual for one member of the household to infect several others, and it is also possible for an individual to infect people with whom he travels in a crowded train. Of course under ideal sanitary conditions, which are obtained in a good hospital, infection by personal contact is practically unknown in a disease like cholera, but it is obvious that people eating out of the same dish might easily communicate the disease to one another. The importance of this factor in the spread of cholera is dependent on the habits of the people and the degree of proximity that exists between individuals. Proximity is of course accentuated during a festival, and it is obvious that the spread by personal contact becomes very much easier in overcrowded trains and dark lodging-houses or chatrams, where the sanitary arrangements are deficient, than in the home of the ordinary villager.

(2) *Infection by flies.*—In an Indian bazar, where sanitary arrangements are very deficient, flies may easily act as an intermediary in carrying infection from the discharges of a patient to food, milk, etc., exposed for sale. This method of conveying the disease has probably been rather overrated recently, but there is no doubt that true fly-borne epidemics have been recorded; one was recently investigated by Greig in Puri in 1912. The conditions necessary for this method of spread of the disease are (*a*) large numbers of flies, (*b*) bad sanitary conditions, nightsoil lying about, (*c*) a source of infection (that is cholera patient or carrier) amongst healthy individuals, and (*d*) a food-supply open to contamination. It will be obvious that at a badly managed festival all these conditions are present, whereas under the normal conditions of a village or small town they would occur to a much less extent. Thus at a festival, particularly towards the end of it, and at certain times of the year, flies literally swarm ; fouling of the ground with nightsoil is common and arrangements for its speedy removal frequently inadequate ; an undetected case of cholera or a carrier may be present anywhere amongst a crowd of pilgrims ; and lastly many of the pilgrims live on food purchased in the bazar or on prasadams which may have been contaminated owing to exposure. None of these conditions obtain to anything like the same extent in an ordinary small town or village as Indians, as a rule, are very careful about their food in their homes. It is probable also that the solitary cases of cholera that occur in the non-epidemic periods amongst Europeans and people who live carefully, are probably due to this method of infection.

(3) *Infection by water-supply.*—Probably 90 per cent. of all cases of cholera in this country are due to the infection of the drinking water-supply. Infection of water may occur in many ways. Not infrequently it is brought about by washing clothes belonging to cholera patients near a well or in a tank or river. Burying of cholera corpses in the bed of a river is also very common in some parts of India; using the banks of rivers and tanks as a latrine is unfortunately the practice in many parts of this country; dipping infected *lotas* into wells is also a habit which may occasionally start an epidemic. It is obvious that once a water-supply has been infected, practically everybody who takes the water within a certain number of hours after infection will be liable to attacks of cholera. It is bad enough when accidental infection occurs in a village well or a tank, but supposing the supply happens to be a river, or an irrigation channel, the results are very far-reaching as the infection may be carried miles down the stream. Speaking of Madras Presidency as a whole, there can be no doubt whatever that a very large portion of the cholera in the Presidency is due to the infection of irrigation canals and of rivers.

It is frequently stated that milk is a great cause of spread of cholera. This is undoubtedly correct, and may be due either to the milk being adulterated with contaminated water, or to washing vessels in contaminated water, or to the milk being infected by flies.

We have described above some of the ways in which an infected material is likely to find its way into a local water-supply, but for the full understanding of the subject there is another point which requires discussion, namely, the subject of " carriers " and people incubating cholera, who possess the power of carrying infection long distances, and starting new foci of disease many miles away from the place they actually received the poison. A carrier may be described as a person who is excreting in his fœces or urine live cholera vibrios without suffering from any apparent symptoms of the disease. The recent work by Greig has established the fact that all convalescents after recovering usually do excrete active cholera vibrios for a few days, while a small percentage continue to do so for months and years after complete recovery; and it has also been placed beyond all doubt that a person may harbour in his intestinal tract cholera vibrios which he injested at a place where the disease was prevalent without ever having suffered from cholera himself. It must not be overlooked that the incubation period of cholera may be as long as seven days though in the majority of cases it is not much longer than four; consequently apart from carriers it is quite possible for a pilgrim to be infected at the festival and to arrive home before he develops the disease. It is hardly necessary to state that neither the person incubating cholera nor the carrier can be recognised by any ordinary means of examination; a very elaborate bacteriological examination of the discharges is required.

The arrival of a carrier or person incubating cholera at his home means that a new focus of the disease is established which in its turn may be spread by any of the methods mentioned above; as to whether it is spread or not, depends on the circumstances surrounding this new focus. Thus the carrier may pass the disease to members of his own household only, flies may pass it on to other residents in the village, or infected clothing may be washed near the village water-supply and a violent epidemic result.

It is hardly necessary to dilate at length on the results of the infection of a water-supply at a festival. With all these different methods of conveying the disease the possible magnitude of such a calamity is seen in its true light. If the infection of a village well is a serious accident, the infection of a drinking water-supply at a festival is a disaster indeed. If at a festival at which some 25,000 persons are present the water-supply becomes contaminated, the death-rate at the place alone is likely to be serious, but no one can tell the number of carriers, of convalescents or of persons incubating the disease, who scatter to their homes, each one representing a new centre of disease, and capable of lighting a new conflagration around him.

In considering the cholera problem during festivals we have to deal with measures of prevention required (1) *en route* to the festival, (2) at the festival itself, and (3) while the pilgrims are returning. As regards the first we have already in the portion of the report dealing with railways, pointed out the need for adequate accommodation in the trains to prevent undue overcrowding and have dealt with such matters as the provision of a good water-supply along the line, the arrangements necessary for enabling the passengers to obtain wholesome and uncontaminated food during their journey, and the advantage of adequate latrine accommodation. We come now to the actual festival itself and on this subject desire to say something (*a*) as regards the general management and (*b*) as regards the mechanism required for obtaining information of outbreaks and the treatment of the patients.

We need not insist on the point that the prevention of disease, particularly cholera, during festivals depends very largely on the general organization. The reason why so little cholera occurs on important occasions is clearly because elaborate precautions are taken, details are thought out beforehand, and every one is on the alert. Superior officers undertake the supervision and have the advantage of the best medical and sanitary advice. So well are the really big festivals managed that cholera hardly ever breaks out during their course and even if there are a few cases they receive prompt attention and every precaution is taken to prevent the disease spreading. As instances of how a festival should be run we think we cannot do better than refer to the latest Pushkarams at Rajahmundry and Bezwada and the Mahamakam at Kumbakonam. For general reference we reprint the whole of the correspondence read in G. O. No. 832-M., dated the 22nd May 1909, as an appendix to our report. We should like further to mention the last Chittrai festival at Madura as one which was ably and skilfully managed.

We are, however, by no means convinced that the smaller and more frequently occurring festivals receive the attention which in the interests of public health we think they deserve. We consider that there is a large amount of evidence to show that the arrangements made for them are, if not actually bad, at any rate capable of great improvement. They are too often left to the control of a Sanitary Inspector or a Sub-Assistant Surgeon and it would not be too much to say that many of the smaller ones practically run themselves. It is necessary to remember that at any moment during a festival situations may arise which, if not properly handled, may be fraught with the direst consequences. The persons in charge should therefore possess experience and knowledge and should have sufficient authority to deal promptly and effectively with such a case as the infection of a well with cholera germs.

Collectors are busy men and the Sanitary Commissioner has to tour over the whole Presidency. We do not of course wish to suggest that a Collector should be expected to camp for ten days at such a place as Velangani or that the Sanitary Commissioner should visit every festival in every district. The Collector, however, has Assistants and the Sanitary Commissioner has his Deputies and we think that such officers might be more frequently instructed to supervise the arrangements at festivals than we believe they are at present. We think that festivals should be divided into various classes, that at some of them it should be incumbent on the Collector or the Sanitary Commissioner to personally direct operations: others might be under the superintendence of Divisional Officers or Assistant Collectors and Deputy Sanitary Commissioners: at others again the District Medical and Sanitary Officer or his Assistant should supervise operations in conjunction with Municipal Chairmen and Presidents of Taluk Boards; while in some cases it may be sufficient to leave the Tahsildar with a Sanitary Inspector or Sub-Assistant Surgeon to make the necessary arrangements. We know of course that this is already done to a certain extent, but our point is that, we believe, it is not done with sufficient care or regularlity; also we must once again insist that the small festival is as dangerous to the public health as the large one,—often more so in fact because so generally ignored.

We should also like to see the reporting on festivals more intelligently and more carefully done. It is obvious that if the reports are written by a Divisional Officer or a District Medical and Sanitary Officer they are likely to be much fuller, to contain

more valuable information and suggestions and to carry more weight than if they are left to a young and inexperienced Sanitary Inspector. Such reports should be carefully filed for future reference so that the experience gained in past festivals may be utilised in the future. Again and again in our tour we have found a most extraordinary want of information as to what has been done on previous occasions; the officer concerned with a particular festival is more often than not a different man to the one who was responsible for former arrangements and is very frequently entirely new to the work.

Mechanism for obtaining information of outbreaks of cholera and treatment of patients.

22. From what we have already said on the subject of the spread of cholera it is obvious that a very important part in the prevention of the disease in a large crowd is some mechanism for obtaining early information of all cases and for reporting these to some central authority who will arrange for the treatment and isolation of the patient and for thorough and prompt disinfection. Wherever the Committee have visited a pilgrim centre and have discussed with the local authorities such matters as past epidemics, cholera figures, hospital accommodation, etc., we have been struck with the fact that there is at present practically no organisation for reporting cases of cholera, that there is a great lack of legal power to compel the occurrence of such cases being brought to notice, that patients are not usually removed from a crowded dwelling and that the number of cases which receive treatment in the hospital is infinitesimal. It is necessary to discuss these matters more fully. Cholera cases that occur at festivals can be divided into two classes:—(1) those that occur in private houses whether amongst visitors or local residents; and (2) those that occur in public places such as lodging houses, choultries, matams, temporary camps, etc., where the persons attacked are certainly visitors to the town. We consider that it should be compulsory during the period of a festival that all cases of cholera should be reported whether they occur in a public lodging house or in a private house. This is of vital importance because, one of the first points that an officer in charge of remedial measures wants to know is, whether the case is indigenous or truly imported; in other words whether the patient has contracted the disease in the town from a focus that exists there or whether the focus of the disease which infected the patient is somewhere outside. In most outbreaks the first case is usually noted, often we believe erroneously, as imported and the origin of subsequent attacks is not investigated though very frequently they, pretty obviously, have no connection with the former. Further, whether the case is removed to a hospital or not, disinfection must follow in order to protect the general public.

We are given to understand that it is proposed to strengthen the existing Act so that all lodging houses, choultries, matams, etc., shall be subject to license and the responsible manager in charge should then be obliged to report cases of infectious disease occurring in his house as a condition under which he obtains his license. We wish however to point out that if cholera is to be successfully combated the authorities should have accurate knowledge of cases which may be occurring in private houses or amongst the residents of the town as well as amongst visitors, and during the period of a festival we should like to see the notification of cholera cases made generally compulsory: for cases occurring in private houses the occupier or the nearest male relative of the patient might be made responsible for bringing the attack to notice. We fully admit that the method of dealing with these two varieties of cases must be different, that is to say, whereas it must be made practically compulsory for all cases amongst pilgrims in public lodging houses to be removed from their immediate surroundings and taken to hospital, we do not propose that anything more than moral pressure should be brought to bear on the permanent residents of the town. Though of course if the patient is allowed to remain in his own house steps should be taken to isolate him if possible and disinfection should be thoroughly carried out. It is apparent to anyone, who is familiar with the conditions at a festival that pilgrims in public places attacked with cholera must be removed to a hospital, and we consider that the neglect of this precaution is one of the most serious defects in the existing methods of managing festivals. If legal authority to do this is wanting, it must be provided in some way. Everywhere we went we were informed that cholera patients will not come to hospital. One naturally wonders what sort of medical treatment they receive at the hands of the visiting Assistant Surgeon; it

must, we think, be mostly of an unsatisfactory and out-of-date nature and probably consists in giving the patient some form of pill. The Committee are greatly struck with the apparent lack of practice of the more recent methods of treating cholera patients. We refer particularly to the work of Sir Leonard Rodgers and Dr. Bishop and others and we are astonished to find that so few of these most valuable discoveries are used in this Presidency. We feel quite sure that a little more up-to-date methods on the part of the hospital etablishment will very likely largely remove the difficulty and the dislike of going to hospital. We were informed by the Civil Surgeon of Chittoor that he succeeded in saving eight lives out of nine in a recent cholera outbreak by using these more recent methods and that this fact has considerably overcome the distaste for going to hospital at that place. We recommend this to the earnest attention of Government, for we consider that this inducement, combined with suitable legislation, will partly overcome the difficulties that at present exist. If removal of patients to hospital is to be insisted on, suitable accommodation, staff and treatment must be forthcoming. We have inspected cholera hospitals and sheds in every place that we have visited and with the exception of Negapatam, and possibly Conjeeveram, the arrangements we have seen have been very deficient and in many cases the buildings are erected for appearance only. Chidambaram may be given as an example of a place where the isolation hospital is situated outside the limits of the Municipality, on a piece of waste ground with no arrangements for staff to wait on patients. Naturally, if anybody were put into such a building he would run away as soon as he was well enough to do so.

In all places where pilgrims come throughout the year and in all where festivals of any magnitude occur, suitable accommodation must be provided for cholera patients in reasonable proximity to the hospital or dispensary so that patients can receive adequate attention. As long as the cholera shed is used merely for paupers, picked up on the road side, so long will it be an impossibility to induce better class pilgrims or residents to go there for treatment.

Before leaving the subject of the treatment of cholera at festivals, we should like to mention with approval the organization which exists for sending "Cholera Parties" from Madras to infected places. This is a very excellent arrangement, and does much to stem the disease in the districts especially when occurring in small villages remote from a hospital.

The prevention of the spread of cholera by returning pilgrims.

23. The whole subject of prevention of the disease by carriers or people incubating the disease is one which is fraught with very many difficulties, and one on which knowledge is very incomplete. There are, however, several points which we consider are well worth laying before Government. One point we have noticed in our travels has already been laid stress upon, namely the extremely inaccurate and careless way in which cholera outbreaks are investigated: further we are of opinion that the best use is not made of the existing sanitary organisations in warning district officers of the approach of infection. When cholera breaks out at a festival certain measures are adopted by the people on the spot to combat it, but the Sanitary Commissioner is not warned by telegraph of the outbreak of the disease unless additional staff is required. As a general rule he knows nothing whatever of the outbreak of the disease until the pilgrims have arrived at their homes, and by this time nothing can be done in the way of preventive measures. In the first place we consider that whenever cholera breaks out at a festival, the Sanitary Commissioner should be warned by wire of the fact, he should be informed whether the affected person or party are visitors to the town, and, if so, should be given particulars as to where they came from, and where they propose to go. He would then be able to communicate with the local authorities of the place of destination and ask them to be on the alert. We are informed at Rameswaram that a party of Malayalis who had visited Srirangam were infected with cholera and several cases occurred there; at Rameswaram others were attacked: having completed the visit at Rameswaram the party proceeded to Devipatam, a small shrine some distance off the railway in the Ramnad district; here some others of the party sickened: the party next proceeded to Ramnad, in order to take the train to go home, where others of the party became infected with the disease and were treated in the Ramnad hospital. We consider that if proper vigilence had been exercised in this case at

Srirangam the officer in charge of the festival arrangements should have warned the Sanitary Commissioner about this party and he in his turn would have communicated with the authorities at Rameswaram and Ramnad where the pilgrims proposed to proceed. It appears to us that a little co-ordination between the officer in charge of the festival, the Sanitary Commissioner and the local officers of other districts would considerably reduce the chances of importation of cases into other parts of the country hitherto free from cholera. Further we are of opinion that whenever cholera has become prevalent amongst pilgrims at a festival, special warning should be sent by the Sanitary Commissioner to the railways and to the districts where the people largely came from, so that the officers may be on the look out for cases amongst the returning pilgrims. In urgent cases the officer in charge of a festival should wire direct to the District Medical and Sanitary Officer of the district concerned, any fact of importance concerning the movements of suspected pilgrims, a copy being sent to the Sanitary Commissioner. Considering the scantiness of our present knowledge on the subject of cholera "carriers" and their effect on the public health, the Committee are strongly of opinion that the whole matter requires very careful investigation by a skilled officer and recommend that it be laid before the Government of India and the Central Research Committee in order that work on proper scientific lines be commenced as soon as possible.

Water-supply.

24. From what we have said on the subject of the spread of cholera by means of water, it is obvious that by far the most important feature requiring attention in a festival town is the water-supply. With one good water-supply and no bad or indifferent sources in the neighbourhood, cholera would be a comparatively rare disease, even if there were opportunities for its spread by flies or by personal contact. Therefore it is of the utmost importance that at every festival place there should be a good source of supply and that it should be protected from outside contamination. This can only be properly done if it is laid on in pipes. In this respect the Madras Presidency is probably ahead of other parts of India, but there still remains a good deal of work to be done as will be seen by reading the separate reports on each town visited. Under ideal conditions not only should there be a good piped supply, but there should be no secondary sources. Here lies the difficulty that sanitarians have to face in India. Many towns have filtered water-supplies, but there always exist in addition a large number of wells, tanks, irrigation canals or rivers which are very dangerous and which are often entirely responsible for the spread of the disease. For the overcoming of this difficulty we can give no general panacea; in no two places are the conditions identical; each centre must be treated separately. We may, however, point out certain defects and lay down some general rules. In all places where a protected supply is installed it must be ample both for festival and non-festival times. Where the supply is deficient in quantity, indifferent and unprotected supplies must be used and, as these usually receive less attention than if there were no pipe supply at all, it may sometimes happen at the time of a festival that a deficient pipe supply is actually worse than none at all. Conjeevaram and Tirupati are examples of this state of affairs. For towns possessing filtered water-supplies, the recent cholera figures of Tirupati and Conjeevaram are very disappointing. They show that for many years there was comparatively little disease, but recently there have been considerable outbreaks more or less connected with the festival. For this the growing insufficiency of the pipe supplies must be, in some measure, responsible.

In Conjeevaram the state of affairs was brought about by gross mismanagement on the part of the Municipality in the way they gave house connections; when the supply was first installed there was a twenty-four hours supply at the hydrants; this has now been reduced to a very limited and intermittent supply owing to the great wastage from house connections. The Committee are very much impressed with the necessity of maintaining a constant supply of water at the hydrants during festivals, otherwise the good done by the water-supply is likely to be largely nullified by pilgrims using contaminated supplies in the shape of tanks and wells.

In several places in the course of our tour we have recommended the installation of protected supplies, among others at Tiruchendur, Alagarkoil and Palni, and the Committee wish to emphasise the urgency of these suggested measures. When we use the term "protected supply" we wish it to be understood that this

phrase does not necessarily mean the elaborate system which is usually called "water works," consisting of pumping plant, filter bed, and mains. We consider that a sub-artesian boring such as at Kumbakonam comes under the head of a protected supply and the term is equally applicable to an arrangement for pumping water from a well into a steel tank and allowing the water to be distributed by a row of taps. The Committee consider that there is a great field for these minor protected supplies both for temporary and permanent needs. There are many smaller places in which it is not possible to provide a full water works with an elaborate distribution system, but where less pretentious arrangements are very necessary. The deep boring at Kumbakonam has already been mentioned. This boring was of great service during the Mahamakham festival and has recently been completed in a very satisfactory style and is undoubtedly a great benefit to the town. The Committee are of opinion that this method of procuring water is probably capable of considerable extension and recommend further investigation into the subject. There must, however, be a large number of places, where all that would be necessary during festival times, would be to enclose one of the best wells in the towns, fit a small pump driven either by a petrol or oil engine and raise the water into an overhead tank. Should the resources of the town be very limited, we recommend that the engine and pump should be fitted only during the actual festival itself and removed after it is over. It is possible now-a-days to purchase a small plant for a comparatively small sum, which can be managed by anybody with such knowledge as the ordinary motor car driver possesses. We are of opinion that it would be well for Government to maintain a certain number of these portable pumping plants to be used at the various festivals. Whilst this suggestion is likely to answer admirably as a temporary measure as applied to a festival, we do not consider that the indiscriminate installation of pumps, whether power or hand driven, throughout towns or villages is likely to be satisfactory. Mechanism of all kinds requires constant attention and the life of a hand pump attached to a public well will probably be not longer than a few weeks and the difficulties in the way of repairs and replacements are very great. Those which we have seen were almost invariably out of order. It may be asked why it is that the village pump in England had such a long vogue? The answer is that public opinion was sufficiently strong to prevent all wilful damage to it and when accidents occurred the village blacksmith was always at hand to repair it. Neither of these two conditions are found in this country. The Committee therefore consider that as a permanent arrangement it is only advisable to instal pumps when a proper engine room staff can also be provided. There are many places in the Madras Presidency where small festivals take place which have an extremely bad water-supply during the festivals. These places cannot afford to maintain a proper engine staff throughout the year, but it would be in the interest of the community to send a portable engine and pump and to run a temporary installation for, say, a fortnight or three weeks while the festival lasted. We would point out that the custom of each individual dipping his own *lota* into a well, or wading into a tank to draw water, is undesirable under the normal conditions of village life, but under festival conditions, the chances of contamination of the water are much increased and the results following such an accident are so far-reaching that every endeavour should be made to remove this danger at such times.

There is one more recommendation which the Committee wish to bring to the notice of Government which is more or less connected with the matter of water-supply at festivals. We have already stated that some of the worst districts for cholera are those where irrigation canals are plentiful. This is no doubt due to infection of the water in the canals by inhabitants living on the banks. We consider that a considerable decrease in the mortality from cholera would result by constructing storage tanks, reserved for drinking purposes, to be fed by canals. Water from such a tank is much safer than water brought direct from the canal itself and a tank is much more within the range of practical politics for a village than any other means of supplying water. Of course if funds permit a pumping plant to distribute the water and to fill the tank full prior to the closing of the canal are very desirable additions but are probably beyond the financial powers of most villages. We have suggested that at Tiruchendur a scheme on similar lines to the above, should be installed to provide the town with a protected supply.

The Committee wish to draw the attention of Government to one source of supply which is almost peculiar to the Madras Presidency and which we believe is

responsible for a great deal of ill-health. We refer to some of the rivers within the Presidency. Any one with knowledge of the country will remember the conditions which obtain in such rivers as the Vaigai, the Pennar, the Swarnamuki, the Vegavathy and many others. These consist of a broad bed of very coarse sand with occasionally a trickle of clear and apparently wholesome water running over it. The " buggas " which are common in the Deccan and which we noticed at Tirupati have certain points in common with the rivers. They are ground springs which arise in the coarse sand, similar to that found in the river-beds, and the water usually is lead away down open channels cut in a porous sandy soil. Wherever these rivers or buggas exist it is customary for the people in the neighbourhood to dig small pits, usually under two feet in depth, to obtain a water-supply. As long as the sand of the river-bed is not fouled, or the water is obtained at a considerable depth, the supply is most excellent and satisfactory : but should it so happen, as is unfortunately too often the case, that the banks of the river or stream are used for purposes of nature and that the surface of the sand is contaminated with cholera bacteria, these shallow pits probably yield a more dangerous supply than the water in the river itself, because while cholera bacteria would rapidly die out in the river, owing to the action of the sun, or be carried down the stream by the current, the bacilli deposited in the sand will probably remain alive for a long time and will continue to infect the water-supply for many weeks. There is little or no doubt that Madura derives most of its cholera from this method of obtaining water in the bed of the Vaigai. There is also no doubt that the fouling of the sand at the edge of the buggas in Trichanur is largely responsible for the high cholera mortality of this place. Kalahasti is another instance where the people make use of the water derived from the river sand. The figures show that for a small place the number of cholera cases there is very large. We also consider that the immunity from cholera enjoyed by the large crowds of pilgrims at the Mahamakham festival at Kumbakonam was largely due to the wise precaution of keeping people out of the river-bed altogether. We fully understand that it is not possible on all occasions to exclude people from the sandy beds of these rivers, but if the water is to be made use of, tube wells sunk as deep as possible should be substituted for the pot wells and pits, and most scrupulous care should be taken to prevent fouling of the river-bed by pilgrims. We may mention the last Chitrai festival at Madura as an instance of a successful result obtained by careful organisation when many conditions were favourable for the spread of the disease.

Before closing the section on water-supply we wish to say a little more on the subject of the attention that is necessary to a source of water which is mostly used for bathing purposes. Any one conversant with the habits of pilgrims in this country knows that with the enormous number of sacred tanks and bathing ceremonies, we have the constant danger of starting cholera epidemics from these sources. In cases of the sacred tanks in which bathing is enjoined by religious teachers very little can be done. Pilgrims are, however, gradually becoming more educated and it is to be hoped that the drinking of this water will slowly disappear altogether. One has only to watch a party of pilgrims at their devotions to know that many of them, particularly the women, do swallow a small quantity of this holy water, although for drinking and cooking purposes they resort to the pipe supply. Something may possibly be done at large festivals by adding a dilute solution of hypochlorites at the edges of these tanks just immediately before sunset. It is not claimed that this method is free from all objection, but it is certainly worth a trial where it can be used. The frequent cleaning out and removal of silt of these bathing tanks is also very desirable and should be done whenever it becomes necessary. Other sources of supply which are unfit for drinking purposes and to which no particular sacredness attaches should be guarded to prevent the water being taken away and in the case of wells, which are of doubtful purity, they might with advantage be coloured so heavily with permanganate of potash as to render the water unfit for drinking purposes during the festival. In dealing with the secondary or bad sources of supply in towns to which pilgrims resort throughout the year, the Committee are strongly of opinion that very drastic action is necessary, we particularly refer to Tirupati, Rameswaram and Conjeevaram. All these towns in a short time will be provided with a wholesome supply. The doubtful wells, bad tanks, etc., should be permanently filled up so as to remove this source of danger. These remarks do not apply to sacred temple tanks but there are a

very large number of other ponds which are a constant source of menace to the health of the community and which in these three places should, we consider, be permanently done away with. Finally we wish to record our opinion that the permanganating of wells is a satisfactory measure and it should always be resorted to shortly before a festival occurs.

Food supply.

25. As regards the food supply at festival times nothing need be said about the ordinary daily meals cooked by the pilgrims themselves or those provided by the charitable organisations. These are nearly as satisfactory as those prepared at home. The two main sources which are liable to spread disease are: the "prasadams" or food which has been offered to idols and the light refreshment taken in various coffee shops and restaurants. As regards the former we fear that nothing we can suggest would be likely to be very efficacious. On the whole we consider that these offerings are much less dangerous to health in the Madras Presidency than they are in other parts of India chiefly because the prasadams are usually eaten fresh. As regards the food supplied in the coffee shops and restaurants, we are strongly of opinion that much greater care must be taken by the sanitary authorities in the management of these eating-houses. The coffee shops in most of the pilgrim centres are licensed under the existing Municipal Act, but the supervision exercised over them is extremely little. We inspected many of these in various parts of the Presidency and in practically every case the houses were dirty and it is obvious that there was no sort of effective supervision. The Municipality must be made to understand that their duty does not end when they have issued a license to the owner, the place should be inspected regularly, it should be whitewashed at least once a quarter and all bad provisions seized. If the existing staff of inspectors cannot do the work, additional staff must be provided. Restaurants are not at present licensed, but we hope that they soon will be, as also all milk vendors, and sweetmeat sellers. We understand that a food and drugs Act is now before the Governor-General in Council and it is hoped that provision of this bill will give adequate powers. We are very strongly of opinion that it is particularly necessary in towns which pilgrims frequent.

Conservancy.

26. Good conservancy arrangements are a necessity in all towns, but at a festival place, this is of vital importance if disease is to be controlled. The standard of efficiency that may be looked upon as fairly satisfactory in a small municipal town is not sufficient for a large crowded festival. When discussing the methods of the spread of cholera it was pointed out that as long as the excreta from either carriers or cholera patients is left lying about accessible to flies, so long is there a considerable danger of spreading the disease. By far the most important point in the opinion of the Committee is not as to how many latrines should be erected, or where they should be erected, but how soon the fæcal matter can be removed beyond the reach of flies. In other words, it is a question rather of plenty of staff and supervision than of number of latrines. A large number of latrines with deficient staff will still mean that nightsoil is left exposed for many hours of the day; this in itself, under festival conditions, constitutes a very great danger. As long as the latrines, streets and neighbourhood are rapidly cleaned up in the morning the chances of the spread of disease are greatly reduced. We do not propose to go into a lengthy description of the various types of latrines used. For festivals the ordinary temporary tatty enclosure is as good as any other. Speaking generally from our observation, we consider that the numbers usually erected are adequate, but we are not quite certain as to whether they are kept sufficiently clean.

In times of festivals there is sure to be a large amount of fouling of the streets, open spaces and by-lanes by pilgrims and it is the duty of the sanitary establishment to clean up these places as early as possible. Immediate punishment for fouling the locality has a very excellent deterrent effect as we were shown in the recent festival in Madura where a special Magistrate was stationed in the bed of the river to punish at once all breaches of sanitary bye-laws.

As regards the number of staff that is necessary, the Sanitary Commissioner of the Province is always prepared to advise and also as to how the work can be

best apportioned to them. The report on the arrangements of the Mahamakham festival at Kumbakonam is an example of how the conservancy staff should be divided and the work allotted to each department. The Committee would like to see more of these excellent plans of campaign drawn up for the larger annual festivals with notes as to how they succeeded. The Mahamakham and the two Puskarams are well provided for in this respect, but the same method of carefully recorded experience is capable of application to all the more important annual festivals.

The Committee are also very strongly of opinion that each public resting place such as lodging-houses and choultries should be provided with a good latrine, preferably of a permanent nature which should be conserved by municipal or union staff. Many of the choultries, which are otherwise most excellent institutions, are sadly lacking in this respect.

Financial.

27. Throughout our report we have made recommendations for the improvement of sanitary conditions at the various centres of pilgrimage we have visited and there are many other places of equal importance which we have not been able to see. We have been impressed everywhere with the supreme importance of protected water-supplies in particular, and also with the necessity for better drainage, more choultries, infectious disease hospitals, larger, better qualified, and consequently more highly paid sanitary and conservancy staff. These requirements cost a great deal of money and while we are aware that much, especially in the matter of water-supplies and the building of hospitals and dispensaries has been accomplished in recent years and that Government have given, are giving and propose to continue to give, large sums in aid of such undertakings, it is obvious that an immense amount remains to be done, that progress is still slow and that finance is always the great difficulty. We realise that we are a sanitary and not a financial committee and that our primary duty is to point out what we think requires doing not to devise ways and means as to how it can be accomplished. We cannot, however, conclude our report without some reference to two matters to which we have given some thought and which we have discussed in a number of places with those who seemed to us to be directly concerned or whose opinions are likely to be of value on the subject. We refer to the possibility of the making of some provision under which Devasthanams could contribute to works necessary for the health and comfort of the pilgrims who worship at the temples under their charge and to the advisability of imposing a tax on the pilgrims themselves.

The propriety of raising a pilgrim tax in the Madras Presidency was examined by Government in the year 1903 upon a suggestion put forward to that effect by the Municipal Council of Conjeevaram. Out of twelve Municipal Councils consulted on the subject, seven were opposed to the measure and five were in favour of it. At the time it was negatived, Government recording their opinion (G. O. No. 1235-M., dated 4th September 1903) that, "as at present advised they were disposed to accept the view that the imposition of a direct tax on pilgrims involves such difficulties as render its introduction inexpedient, and that the better course to pursue will be, on the next occasion of the revision of the Municipal and Local Acts, to take power to charge on temple authorities the cost of special sanitary arrangements made on account of festivals." During recent years, however, opinion in favour of a pilgrim tax has, we believe, become more pronounced and in the revision of the Acts which is now in contemplation, the possibility of having recourse to both these means to assist in raising the large amounts of extra money which are essential before our places of pilgrimage can be put in the sanitary condition in which every one would like to see them, is likely to be further considered.

Temple contributions.

28. First as regards the position of the temple authorities. We believe that either by contributions to local bodies or through their own agency a great deal more than is done at present might be accomplished by the trustees and managers of temples towards promoting the comfort and well being of the votaries, and we think that all legal impediments in the way should be removed. Some Devasthanams already give small amounts in aid of hospitals and dispensaries or towards the general sanitary expenses of festivals. As instances we may mention Conjeevaram where Rs. 150 per annum are given to Municipal Council in connection

with the Ekadasi festival; Srirangam where an annual contribution of Rs. 180 is made for the maintenance of the hospitals and Tirupati where, till very recently, the Mahant allowed Rs. 5,000 per annum to the Municipal hospital. The sanitation and conservancy of Tirumalai is entirely in the hands of the Mahant : and we have mentioned in our notes on that place the extensive works which the Devasthanam proposes there to carry out. The principle that religious bodies may assist in measures of public utility undertaken on behalf of pilgrims seems therefore to be generally recognised. We are assured that the construction of dispensaries and hospitals, the digging of tanks and wells and other works for the storage of water, and the provision of choultries, have always been held to be forms of religious charity and are considered of equal merit with the construction and upkeep of temples. The application of temple funds for purposes tending to promote the health and comfort of the pilgrims will therefore not be foreign to the original object of the endowments but will distinctly come under their scope. There are, however, difficulties in the way. Some of the temples are managed and administered under schemes settled by courts of law; in others the expenditure incurred by trustees and managers is defined by long-standing custom and practice and they are naturally afraid to go beyond the existing "Dittam"—a scheme of administration, from fear that their action might be challenged in the courts. Expenditure of the nature or on the scale we should desire, is thus not specifically provided for under existing schemes for the management of temples or sanctioned by practice; and there seems to be need of legislation to empower it.

We are inclined to advise that if legislation is undertaken, it should be only by way of making contributions permissive and not compulsory. We do not think that public opinion is in favour of any direct tax on religious institutions : what is desired is that any doubts as to the legality of expenditure of temple funds on what may be considered semi-secular objects, may be removed and that if temple authorities desire to assist, for instance, in a water-supply scheme, or to contribute to the upkeep of a sanitary staff, they may feel themselves secure in so doing. Several of the persons whom we have questioned, including those directly connected with temple institutions, stated that if an assurance could be given on this point they believed that many Devasthanams would willingly co-operate and that the general body of worshippers would approve of their action.

Of course if the temples were permitted, still more if they were compelled to contribute, the question might rise whether they should not have a voice in the expenditure of funds and we think that good deal might be said in favour of the temples having a representative, if desired, on the Municipal Council or local body in towns which derive much of their importance from the temple situated therein. In many places the maintenance of the streets round the temple or round the hill on which the temple stands is a subject of considerable dispute. In Rameswaram the streets in the neighbourhood of the temple are not metalled and it would be a great convenience if they were kept in a better condition than they are at present. The Devasthanam authorities at Tirupurankandram and at Palni desire to improve the circular roads round the temple hills and to provide avenues for the benefit of the pilgrims. At Udipi the conservancy of the streets leading to the temples might be much improved if there were a better understanding between the Taluk Board and the Swamis of the Matts. It is perhaps not always or often desirable, that temple authorities should themselves undertake public works: the proper course would seem to be for them to contribute towards them and have a representative on the council if so disposed.

Pilgrim Tax.

29. Most of the persons with whom we have discussed the subject are agreed that in principle a tax on pilgrims is unobjectionable and the majority are decidedly in favour of its introduction. It is not unknown in other parts of India : it has been tried in the Bombay Presidency and in the north we learn that in Hardwar and Benares the Municipalities derive a considerable annual revenue from this source. A terminal tax is imposed in Calcutta and has been suggested for the City of Madras and if the argument that temporary visitors, who enjoy the amenities of town life for a season, should contribute to the finances of the Corporations is accepted as sound, the same argument may, we think, be employed with even greater force in the case of pilgrimage centres. Many of the places of pilgrimage in this Presidency are, as we have seen, small and derive their importance principally

from the temples situated therein. It is manifestly impossible to expect the residents in such places to furnish any large proportion of the funds which are required to make them healthy and while no doubt the pilgrim bears a share of the general taxation of the country from which are derived the funds out of which Government make special grants for sanitation, it is only fair that he should, if possible, in addition be taxed directly on the occasion of his visit to a particular shrine. If the tax is imposed indirectly and is small in amount, it would probably be unnoticed by the majority of pilgrims: those that were aware of its existence would, we think, realize its justice.

In actual practice, however, there are a good many difficulties in the way: this is especially the case when it is attempted to tax pilgrims coming in by road. This would seem to be perhaps the natural and most obvious way of levying the tax, but where it has been tried, particularly in the Bombay Presidency, it has been found to be very unpopular: it gives room for a good deal of oppression and possibly speculation and is apt to prove less remunerative than might be expected. It generally involves some form of "farming" or contract and while it may possibly be thought advisable to take legislative power to levy such a tax, its use is really essential in places which are not on the line of rail, we strongly deprecate its general introduction. The same contentions would, we think, apply with even greater force to any proposal to levy the tax as an entrance fee to the temples: this would moreover not improbably be regarded as a direct tax on religion and would be resented not only by the temple authorities but also by the pilgrims themselves.

It seems to us, therefore, obvious that the tax, for the present at any rate, should be confined to a tax on pilgrims arriving by rail and this can best be imposed by means of a surcharge on the issue of tickets to a pilgrimage centre. It should not, we think, be difficult to arrange this with the railway companies, but even here the matter is not so easy as at first sight might be supposed. It is represented to us that while there would probably be no great difficulty if the tax is to be a permanent one, paid on all tickets issued, throughout the year, to a particular place, the matter would be much more complicated if numerous exceptions have to be allowed or if the period of surcharge is limited to the few days during the occurrence of a festival. There seems to us to be a good deal of weight in these contentions and while we think the difficulties might possibly be overcome, we consider that at first it would be better to begin with one or two places which are pilgrimage centres pure and simple or where, at any rate, the fact that the town is a great pilgrimage centre overweighs its importance in other respects. Rameswaram and Tirupati are instances in point and we recommend that the tax be imposed on them and be levied throughout the year. It may perhaps be found advisable to excuse from its incidence, the holders of season or return tickets issued to permanent residents, and booking from within a radius or 10 or 20 miles might possibly be exempted from surcharge. These, however, are details which no doubt would receive full consideration when legislation is undertaken.

Several of the Municipal Councils seem to favour the idea of a special railway tax only for particular festivals. This would, as above indicated, give a very considerable amount of trouble to the railways and even apart from that difficulty, seems open to numerous objections. One is, that even with the extension of railway traffic a large portion of persons attending a festival still come in by road: if these are excluded as we think they would have to be, the tax would be limited in scope and would not perhaps be very remunerative. It is argued that pilgrims travelling on foot are as a rule poorer than those coming by rail and it is perhaps just that they should be exempted. A more serious objection is that many of the towns which have important festivals are also large commercial or business centres and many persons booking to them during a festival would very likely be proceeding there with quite other objects than those of religion or amusement. There are no doubt always hardships in any form of taxation and it is not perhaps altogether unreasonable to expect such persons to pay without much demur an extra anna on the railway tickets during the days a festival is in progress, but every case would have to be considered on its merits. In places like Conjeevaram, Tiruvanamali or Chidambaram the importance of the festival might perhaps be considered to be so great, that the few persons proceeding thither on other business, while it was being held, might justly be ignored. On the other hand we think it would be quite impossible to impose the tax on tickets issued—let us say—to Madura during the

Chittrai festival or to Negapatam on the occasions of the festivals at Velangani or Nagore. Srirangam is another case in point. There must be many people arriving at Trichinopoly which is the nearest railway station—who would not be proceeding to Srirangam even during the festival. Palni and Trichandur are instances of small places much in need of money where some such assistance as a pilgrim tax would be peculiarly valuable but which are a long way from the line of rail. A railway is in prospect for both places : until its advent we think the imposition of the tax would be impossible.

The tax would probably have to be invariable in amount from whatever distance the passengers travelled—one anna for a third class ticket is the amount usually suggested—there being no charge from within a fixed radius where the ordinary fare would be so small that an extra anna would be felt as hardship.

We consider, then, that there is much to be said in favour of a pilgrimage tax which, while small in amount and pressing lightly on the particular individual, would amount in the aggregate to a sum which, though by no means large, would still help in financing sanitary schemes at the various centres and which could be ear-marked for these purposes. We see, however, many difficulties in the way and think that it would only work really successfully in places where it can permanently be imposed. It is obvious, therefore, that no very great assistance can be expected from this source and that sanitary schemes for places which, while themselves impecunious, are important as being likely to affect the health of India as a whole, must continue to be financed largely, if not wholly, by the general taxpayer.

PART II.

NOTES ON THE VARIOUS PLACES VISITED BY THE COMMITTEE.

MADURA.

Population, 1901	Males	52,667
	Females	53,317
,, 1911	Males	67,091
	Females	67,039

Average birth rate per thousand of population of last five years, 34·8.

Average death rate per thousand of population of last five years, 32·7.

For the purpose of the present enquiry Madura is important in two ways (1) on account of its annual festivals—the first and most important of which occurs in the month of Chittrai (April-May) and (2) because throughout the year pilgrims stop in the town on their way to and from Rameswaram to visit the great Minakshi temple and other shrines.

The Chitrai Festival.—This festival celebrates the marriage between Siva and Minakshi, the great event within the town itself being the dragging of the temple car through the streets. As far as the Committee are concerned, however, the importance of the occasion depends not so much upon what goes on in the town itself as in the fact that the festival is also the occasion when the god known as Sri Kallalagar is brought in state from Alagar Koil, a shrine some 12 miles from the town. According to the Madura Gazetteer (page 285) " the popular story accounting for the visit says that Alagar is the brother of Minakshi, comes to the wedding, arrives too late for the ceremony and so returns home in dudgeon without entering the town. " Whatever the real meaning of the ceremony the essential thing to note is that the deity is brought by various stages to the river Vaigai, on the south bank of which is situated the older portion of the town and there stops for 4 days—the various halting places being as follows :—

	Stay.
Ambalagara Muttam	A few hours.
Perumal Koil	1st night.
Vandiur (about 2 miles above the bridge)	2nd night.
Rama Rayar's Mantapam	3rd night.
Perumal Koil	4th night.
Return to Alagar Koil	5th morning.

During the passage of the god and throughout his stay at the river, the surroundings of the various Mantapams and the whole of the river-bed below the bridge, are thronged with pilgrims to the number of about 150,000 and the risk of cholera is very considerable.

At each of the halts on the journey to the town, a very large crowd of pilgrims collect and pilgrims are fed by the charitable organisations of the various Mandapams. The water-supply of these places leaves a great deal to be desired. In several of the Mandapams no filtered water is available, the supply being obtained from very indifferent shallow wells. The pilgrims spend most of their time in the dry bed of the river Vaigai or the immediate neighbourhood and it is this area in particular which occupies the attention of the sanitary staff during the festival period. The date of the festival unfortunately did not coincide with the Committee's visit to the town but a careful inspection of the site was made and all arrangements were described to us by the Municipal Chairman and the Health Officer.

Water-supply.—Madura has a filtered water-supply which is derived from an infiltration gallery in the bed of the Vaigai situated above the town. Of recent years this supply has diminished greatly, so much so that at the driest time of the year the amount of water obtainable is believed to hardly exceed two to three

gallons per head of the population. After rain or after considerable irrigation of the district with Periar water there is usually a certain amount of water flowing in the Vaigai. As long as this condition obtains the infiltration gallery yields a fairly copious supply. In order to remedy the above shortage a scheme has been recently sanctioned and is now in process of execution, for increasing the water-supply of the town by constructing another infiltration gallery 2 miles above the old one. By this means it is hoped to give a very adequate supply to the town at all times of the year. During the festival of 1915 the Municipal Council laid two temporary mains one from the north and the other from the south of the river for a considerable distance along the bed in order to provide the pilgrims with a protected drinking supply. This, however, was found to be anything but adequate and in order to supplement it a large number of shallow wells were dug in the sand of the river, some of these being supplied by municipal agency and others by private people. These wells were mostly made of galvanised iron cylinders sunk about 4 feet 6 inches into the sand, and very strict precautions were taken against allowing the people to take water for drinking purposes from other than the recognised places. Bands of volunteers were organised to prevent nuisance. These did their work with much zeal and enthusiasm and as a result, cholera which had previously been assuming the proportions of a serious epidemic in the town just before the festival, was kept in check and instead of spreading, actually died down during and subsequent to the festival. The Committee consider that the local authorities are much to be congratulated on the arrangements made, but desire to express the opinion that temporary wells in a river bed, especially of the type described, are extremely dangerous. We recognise that at present the supply of drinking water from the pipe supply was probably inadequate for the number of visitors and therefore that the wells were a necessity and will continue to be so until such time as the town supply is drawn from the new source. At the same time the following facts should be remembered. It is well known to bacteriologists that cholera vibrios will not live a long time in water exposed to the sun; there is, however, a large amount of evidence to show that they may live for a considerable period in damp sand and mud in the neighbourhood of rivers, etc. It has been the experience of many that water obtained by scraping small holes in river beds is a fruitful source of cholera. The nearer the surface the water is obtained, the greater the danger in drinking such a supply. We, therefore, consider that in future these open wells should not be made use of, but that tube wells sunk to a depth of 12 or 15 feet would be very much safer and would give an equally satisfactory quantity of water. Even this suggestion should be regarded as a temporary measure only, for undoubtedly the proper method of dealing with the situation is to provide filtered water by laying a permanent supply down both banks of the river. We strongly recommend therefore that as soon as the new scheme is in working order, this subject should receive immediate attention, and that as near as possible to both banks of the river, mains of considerable size, provided with suitable nozzles for constructing hydrants and branches, should be laid. The population on the north side of the river is certain to increase within the next few years so that a main on that side cannot be looked upon as so much unproductive expenditure. Until such time as a large piped supply becomes available, the present system of temporary mains supplemented with tube wells should be continued. We also consider that it is of vital importance to provide an adequate supply of water by means of hydrants to all the various Mandapams and halting places of the car within the municipal limits. As already stated, pilgrims largely congregate round these centres and food and water are frequently provided. The existing water-supplies at these points are, as above noted, extremely unsatisfactory.

Conservancy.—The conservancy arrangements during the festival consist (1) in providing a large number of temporary latrines situated on or near the banks of the river and keeping these as clean as possible and (2) in keeping the bed of the Vaigai free from all contamination. During the last festival both these matters appear to have been thoroughly well attended to and the Committee have no comment to make on the general arrangements. We are, however, informed that it is becoming increasingly difficult year by year to obtain a satisfactory supply of toties to ensure the proper cleansing of the latrines and the general scavenging of the bed of the river. This being so, we suggest that it will probably ultimately be found advisable to construct some permanent water carriage latrines on the south

side of the river. An underground drainage system is at present under construction in the town, but we are informed by the Drainage Engineer that at present it is not contemplated to drain the area near the bank of the river. We consider this should be remedied as funds become available. It has been found in other parts of India, that a water carriage latrine, suitable for the accommodation of several thousand individuals, can be looked after by one sweeper; hence a great saving can be effected by making use of these more modern arrangements. Until such time as this becomes possible, the conservancy problem at this festival is simply a matter of ample latrine accommodation, plenty of staff and good skilled supervision. We desire, however, to note that especially on the north bank of the river, it would seem better to enclose relatively large spaces to serve as latrines, in a corner of which night soil can be immediately trenched and covered up, rather than to provide large numbers of smaller latrines from which the excreta has to be removed to a distance.

Accommodation necessary for the pilgrims.—The Chitrai festival in Madura is held at a time of the year when rain is little to be feared and when sleeping out in the open is no hardship whatever; consequently an elaborate system of camps or huts is not required. The Mandapams are used by a certain number of visitors for sleeping in and some charitable individuals erect temporary shelters. We consider that nothing further is required. The festival is not a long one lasting only four days. The subject of house accommodation for ordinary pilgrims will be dealt with in the next section when dealing with the town of Madura and accommodation for visitors.

Food supply.—At the Chitrai festival most of the people come from short distances and by far the majority bring their own food with them. Eating houses and places of that kind are not largely resorted to during this period. They also will be dealt with in detail in the next section.

Cattle fair.—Immediately after the religious festival a cattle fair is usually held. For this there is no permanent site. The last fair took place on a piece of private ground near the Senkulam Tank on the north-east of the Melur Road, just beyond the toll gate. The place which was pointed out to us is suitable for the purpose but would probably be far too expensive to acquire and may be wanted for the extension of the town; on the other side of the road however is a considerable extent of Government Peramboke, which might possibly be made over to the Municipality for the purpose, especially as the former site of the fair has, it is understood, been taken up for public offices. Whatever the eventual position chosen, the Committee are strongly of opinion that as soon as the extended water-supply scheme is in working order, arrangements of a permanent nature should be made to bring the filtered supply as close as possible to the site on which the fair is held so that a protected drinking supply will be available with as small amount of trouble as possible. A secondary water-supply can be obtained for washing and drinking of cattle from wells or from the neighbouring tank, should these contain water at this time of the year.

II.

We will now proceed with the other portion of the Committee's work in Madura, namely the inspection of arrangements for pilgrims who visit the place at other times than the Chitrai festival.

The importance of Madura as a railway centre is increasing rapidly from year to year, partly because of the improved communication with Ceylon and partly because it is the junction for the line leading direct to Rameswaram *viâ* Ramnad. There is a steady stream of pilgrims coming from all parts of India, as a general rule going to Rameswaram. These pilgrims halt at Madura in order to take rest and food and also to visit the various shrines in the town. We are informed that on an average about 200 pilgrims a day stop at Madura. At the time of the Chitrai festival the traffic becomes extremely heavy. We understand from the District Traffic Superintendent that on the last occasion 81,702 passengers passed through as against 93,480 for the same period in 1914: the decrease being probably due to the fear of cholera which was known to have been prevalent in the town. The festival traffic was managed by the addition of extra coaches to ordinary trains

and by some special trains. We are informed that the arrangements were adequate and that no great delay or special inconvenience was occasioned by the increased traffic.

Accommodation at the Station.—The Committee carefully inspected the neighbourhood of the railway station and the third class waiting rooms, latrines, food supply, etc. As regards the waiting rooms we consider that the present accommodation is satisfactory *as far as it goes.* The building is substantial, the lighting and ventilation is good and the whole place is easily cleansed. The long waiting shed is divided up by expanded metal partitions into various pens, each pen being provided with a separate entrance, booking office and exit. When there are very large crowds, one compartment can be opened at a time to allow pilgrims to go on the platform and take their seats in the train. We believe however, that the extent of the accommodation cannot be considered adequate for pilgrimage traffic which is likely to increase rather than to diminish. The Station-master, the Chairman of the Municipality and other residents of Madura, all informed us that during festival times the whole approach to the station is frequently blocked with visitors waiting for the arrival of the train to take them to their destinations. The accommodation at present seems to be designed rather for the ordinary traffic of a heavy station rather than for the extraordinary traffic of a festival, and while it may possibly be regarded as reasonably sufficient for the needs of the town under normal conditions, it cannot we think, prove equal to the strain occasionally put upon it. We inspected the railway compound and we consider that the piece of ground to the south of the entrance which at present forms the compound of quarters built for an assistant station-master, but now occupied by a guard, might with advantage be used for building additional third class waiting rooms. It would no doubt immensely improve the appearance of the frontage of the station if all the quarters on this side could be removed and thrown into an open space or, the staff being accommodated in the growing railway colony which is admirably laid out on the other side. We realize that it may perhaps be impossible for the Railway Company to go as far as this at present, but at least the particular compound mentioned above might, we think, be given over for the use of the public.

Overhead bridge.—The attention of the Committee was specially drawn to the inconvenience and crushing caused by the inadequacy of this bridge. We trust the railway authorities will see their way to widen and cover it.

Latrine accommodation.—The latrine accommodation of the existing third class waiting room we consider to be very insufficient. There is no latrine directly connected with this waiting room except the one on the platform. In the case of large crowds it is impossible to allow pilgrims to go on to the platform long before the arrival of the various trains and consequently these latrines are practically of no use to the people waiting. Some distance away there is a large municipal latrine which is partly intended for the use of pilgrims. It is, however, too far off to be of much service and the result is that the approaches to the station immediately behind the platform and in front of the station-master's and apothecary's quarters appear to be used as a urinal and not infrequently as a latrine as well. We consider that additional latrine accommodation must be provided and consider that this point should be gone into in connection with the new waiting sheds recommended above. The new latrine should we think contain at least 60 seats of which 25 should be for females. It should be connected with the underground sewer as soon as the drainage works are complete. The latrine on the station platform and the municipal latrine at the entrance to the station compound, should also be converted from hand removal to water connected latrines as soon as possible.

Accommodation for pilgrims in the town of Madura.—The accommodation that is available for visitors to the various shrines in Madura consists largely of the various choultries in the town. The number of these is about a dozen. Some of these are entirely reserved for one particular caste such as that of the Natta Kottai Chetties, others are administered by various official agents. The most important of these is the one managed by the District Board which is known as the Mangammal choultry : this is immediately opposite to the station. The Municipality also have a large choultry under their immediate management. It is hardly necessary to give a lengthy and detailed description of these various institutions. The

majority of them are very solidly constructed of stone and are divided up into various units each consisting of several rooms with cook house, bathing places and latrine, etc., for each. In the Mangammal choultry there are separate departments for Muhammadans, for the very poor, for Brahmans and for other castes. The majority of visitors pay a nominal rent of 3 annas a room per day and 2½ annas for their own cook room, but the very poor can be accommodated free. Rooms are usually arranged on four sides of the small courtyard and the latrine accommodation and bathing places are situated behind; the municipal water is provided in each section. In one particular portion of the Mangammal choultry is an endowed water pandal, the water in this case being brought from a well near the Pacuvumalai. This arrangement we do not consider very satisfactory for the water comes in carts from a considerable distance and opportunities for contamination are obviously very frequent. As far as is known no accident of this nature has occurred but from a purely sanitary point of view the municipal water is much to be preferred. Our chief objection to these choultries is the unsatisfactory type of latrine: in most cases the deficiency is largely of quality rather than of quantity, the number of seats being adequate but the design leaving much to be desired. We do not suggest that the Municipality should at this time insist on any alteration in the existing structures, for within a few years it will be possible to convert these latrines into connected privies; this change will greatly improve the sanitation of these institutions. Until such time as the sewers are ready, careful inspection and an adequate cleansing staff are necessary to keep them as sanitary as is possible. Some of the choultries that were inspected by the Committee are certainly very dark and ill-ventilated, but as a whole the Committee consider they are for the most part sanitary and well managed. The Committee were, however, struck with the fact that the places would be greatly improved by regular cleansing and whitewashing say twice a year. The choultries under private management are licensed as public halting places under section 188 (*m*), Madras District Municipalities Act after inspection by the Health Officer who brings to notice any prominent defects, but no special conditions are inserted in the license.

Eating houses, hotels and coffee hotels.—Within comparatively recent times there has sprung up in the town of Madura a large number of houses where cooked provisions of some sort or other are obtainable on payment. There are few if any regular hotels where people can obtain both accommodation and board; most visitors halt in the choultries and either cook their own food in them or go for meals to what in Europe would be called restaurants. The Mangammal choultry provides a certain number of cooked meals. The Committee were especially pleased with the arrangements at what is known as the Bhima Vilas Hotel near the Mangammal choultry which seems to be a model institution of its kind. There are also many places where coffee, cakes, bread and light refreshments generally are supplied. The Committee inspected several of this variety of institution. The better ones are fairly satisfactory on the whole from the structural point of view but most of them are dark and dirty and require whitewashing. The smaller ones have generally no latrine accommodation. We are given to understand that the coffee hotels are licensed under section 188 (*o*) as places used for the preparation of articles made of flour. The eating houses are not licensed and are subject to no special bye-laws. The Committee do not think there is any occasion to apply a Lodging House Act to Madura but would be glad to see all eating houses of whatever description brought under license and definite sanitary control particularly in the matters of whitewashing, cleanliness of the kitchen and of the places where people sit to take their food, and connection of all waste water drains and latrines with the underground drainage system.

The Committee visited and inspected some of the internal arrangements of the large Minakshi Koil in Madura. The Committee find very little which seems to call for remark. We desire however to place on record our opinion that the present method of pumping out the Potamari Tank within the temple has effected a very considerable improvement in the condition of the water within recent years. Several members of the Committee have been acquainted with the temple for many years and there appears to be no doubt whatever that the systematic removing of the water once a fortnight and the removing of silt once per annum is effecting a considerable change for the better in the condition of the water. The water is no longer fetid and stinking and is certainly less discoloured than in former times. We

recommend that this method be carried out regularly and we do not see any necessity for attempting to fill up the tank either with flood water from the river or with the water from the filtered supply.

The Yellugadai (seven wells) Tank.—The Committee also inspected this tank which we are given to understand is partly filled by the overflow from the Potamari Tank in the temple. We are informed that quite recently silt was removed and that regularly every year the vegetation is cleaned out. At present there is a large amount of green grass growing in the tank which is most undesirable, principally because the growth renders the water a suitable breeding place for anopheline mosquitos. We recommend that arrangements be made to keep down the growth of all vegetation in this tank.

Cholera Hospital.—There is cholera in Madura every year and often almost throughout the year: in 1911 there was a very severe outbreak 1,310 attacks and 960 deaths being recorded, of which 508 attacks and 375 deaths occurred in the month of June alone. This year's epidemic lasting from January to May was also serious, 620 attacks and 465 deaths taking place. The Committee learn that none but the poor, shelterless and destitute are taken to the hospital: other classes being attended in their own houses. The admissions to the hospital in this year's epidemic were January, 11, February, 13, March, 7, April, 6, and May, 1. Many of them arrived in a moribund condition.

The only accommodation provided is a one-tiled shed built on the outskirts of the hospital and capable, it is said, of accommodating six patients. No separate provision is made for small-pox or other infectious diseases.

The Committee think that possibly the reluctance of the populace to seek admission to the hospital is partly due to the inadequacy of the accommodation provided. They understand that it is under contemplation to build a further shed near the Railway but that this also would be regarded as only semi-permanent pending removal of the main hospital to the site selected to the north of the river. The Committee think that it should be seriously considered whether it would not be possible to erect a distinct Infectious Diseases Hospital in Madura. What exactly would be done if, during an epidemic, the choultries get seriously infected, is not apparent. We were shown a number of small corrugated iron sheds in several places in the town which we were told were originally put up as cholera shelters. They are quite unsuitable for the purpose and we are glad to learn that they have never been used and are now merely centres for the mustering of conservancy coolies. We cannot leave Madura without recording our opinion that more adequate accommodation for cholera patients, especially for cases occurring amongst visitors, is a very real need for the town.

TIRUPURANKUNDRUM.

Population, 1901	..	Males	2,316
		Females	2,212
,, 1911	..	Males	2,375
		Females	2,403

Birth rate per thousand of population average of last five years, 27

Death rate per thousand of population average of last five years, 30.

Tirupurankundrum, a Union village situated 3 or 4 miles to the south of Madura, contains a temple which is under the same management as the Minakshi Koil and is of very considerable importance on account of the number of small festivals that are held during the year, no less than 21 being recorded. At some of the bigger festivals the number of pilgrims is understood to exceed 10,000, while for the smaller ones about half that number attend. The Committee had the advantage of being present on one of these occasions and were much interested in what they saw. The pilgrims to the smaller festivals mostly come from Madura town and the immediate neighbourhood, and practically none of them stay the night at Tirupurankundrum. On the more important occasions the pilgrims come from much greater distances, many arrive by train, and remain in the various matams for periods sometimes

extending from two to four days. During their stay they visit the temple, bathe in one of the sacred tanks known as the Sarvana Poilgai, walk or even roll round the hill and also ascend the hill, worship at the temple situated on the top and bathe in a neighbouring spring.

Water-supply.—The water-supply of the town is mainly derived from wells; of these there are about ten which are used for drinking purposes and several others in which the water is slightly saline and which are used only for bathing and washing. We inspected a fair number of these ten important wells; the majority of them are of considerable age being lined with large slabs of granite. The water in this particular year was plentiful and is reported to be good. All the wells we inspected possess one great fault, namely that across the opening of the well are placed granite beams and in some cases iron gratings. On these people stand right above the mouth of the well and take water, consequently a large amount of dust and dirt finds its way into the well from the feet of the people drawing water. Besides this, everyone is allowed to dip his or her private vessel into the well, there being no arrangements made to provide special water drawers. It is perfectly obvious that the practices mentioned above are extremely dangerous and sooner or later the well must be contaminated. We strongly recommend that the Union should provide the two most popular of these wells, namely the Sunyasis well and the Sotukadai, with pumps, overhead tanks and taps, in order to obviate this very great danger of pollution. The Industrial Department of the Government of Madras over a year ago made a boring into the rock near the temple and are reported to have found a good and ample source of supply. The tube is still in the ground but no pump has ever been fitted to it. We recommend that the water should be carefully examined, chemically and bacteriologically, and if found fit for drinking purposes the work should be completed at an early date. As regards the quantity of water in Tirupurankundrum it may be stated that as long as the large irrigation tanks in the neighbourhood are full, there is little or no shortage of water at ordinary times or during the larger festivals, but it is on record that in the years 1911 and 1912 all the wells with the exception of Sotukadai dried up, even the one in the temple compound itself. In years of this nature there must be a great shortage of water and a very grave danger of spreading water-borne disease. It would appear probable that the wells in Tirupurankundrum are fed by percolation from the large tank, and as this tank can be filled from the Periar supply, we wish to record our opinion that in phenominally dry years and when there is a likelihood of water famine, the tank should be filled from the irrigation canal, so as to prevent the shortage and reduce the chances of epidemic disease. We do not consider that it would be an easy matter to provide a piped water-supply for the town of Tirupurankundrum nor do we consider that this is a very urgent matter. The supply of water from wells in the town seems to be adequate and provided proper precautions are taken to render this free from contamination, the supply may be regarded as fairly satisfactory. There are several large tanks in the town which are used for washing of cattle and bathing purposes and none of them are used for drinking.

Conservancy arrangements.—The Union maintain a very small conservancy staff and keep up two latrines. During the minor festivals visitors mostly remain in the town only for a few hours and large latrine accommodation is not necessary, but for the larger ones temporary latrines are provided. The Committee have no remarks to make on this.

Housing accommodation.—There are 150 matams or places where shelter is provided for visitors. Most of these are owned and managed by the various castes who visit the temple. It is admitted that during the larger festivals they are somewhat crowded but the majority of people can get shelter, at any rate, during the night. We inspected several of these matams; they are for the most part stone structures the roofs being supported by stone pillars. The majority of them are not divided up into separate rooms, there being no intention of providing residence for any length of time, but only shelter for visitors during a brief visit.

Trees.—There are a certain number of trees round the hill but the shade afforded is not great and though not perhaps very directly connected with the Committee's work, we should like to note that more extensive planting, either by

public or private agency, would much add to the comfort of the pilgrims and to the enjoyment of the many visitors at this sacred spot.

ALAGAR KOIL.

The temple of Alagar Koil is situated at the foot of some hills about 12 miles to the north of Madura town. It is very famous and wealthy. Reference has already been made to the popular story connected with it in dealing with the Chitrai festival at Madura. The Committee inspected it shortly after the conclusion of the July festival. Unlike most of the shrines yet visited there are no local residents at Alagar Koil beyond a few temple officials and servants. Every day a few pilgrims, perhaps 20 to 40, visit the place. There are three main festivals Chitrai (April) Adi Amavasi (July) Adi (August). The number said to attend are about 20,000, 30 to 40,000 and 40 to 50,000, respectively.

In former days Alagar Koil was probably a considerable place. At present nothing at all remains except some mandapams and even these are showing signs of falling into ruins. Around the main shrine there is a large court-yard in which are situated some temporary buildings used by vendors of food, etc. At the time of our inspection, the whole of the precincts and surroundings of the temple were extremely filthy and in a very neglected condition. Cow-dung and rubbish, not to mention more objectionable material, was littered about in large quantities close up to the shrine itself. In many places there were considerable accumulations of rubbish which should have been removed to a considerable distance from the temple or should have been burnt. The place was swarming with flies and provisions exposed for sale were literally covered with these pests. There had quite evidently been no attempt made to have a general "clean up" after the last festival and we fear that dirt and neglect must be regarded as the normal condition of the place. The path leading from the temple enclosure to the Teppakulum and that leading to the spring up the hillside are evidently used as latrines as there was a very distinct fæcal odour when passing along those ways. On the steps of the Teppakulum there was a collection of rubbish only a few inches from the water itself.

From enquiries it appears that the temple management makes practically no provision for cleansing the enclosure or keeping it even reasonably clean and free from litter. We have seldom seen a place so utterly neglected and in such an insanitary condition. This is probably partly due to the fact that the Temple Committee apparently have no direct control over the acts of the manager when he is once appointed. The Committee do not consider it to be within their province to deal with the thorny question of temple management but feel constrained to remark that as far as sanitary arrangements are concerned this particular temple cannot be considered to be in a satisfactory condition.

Water-supply.—The water-supply for the temple and for the pilgrims who visit the place, is derived from a spring about 2½ miles from the temple situated in a small valley in the hills. There is a small masonry arrangement for collecting the water and it is carried down by a two-inch pipe to the temple to a brick work cistern situated inside the temple compound. Two branches from this pipe exist, one to supply the Teppakulum and another to the manager's private quarters. The cistern is capable of holding probably about a thousand gallons of water and there are four taps on the outside of the building from which the pilgrims can take their supply. The arrangement as it stands is not at all a bad one as the supply is certainly protected from gross pollution. When the water is plentiful a certain amount is allowed to run into the Teppakulum which is situated about 300 yards from the temple enclosure. The serious defect of the whole system is that at the time when the two important festivals take place in the month of Adi, the supply is extremely deficient. At the time of our visit the spring was so low that the two-inch pipe was certainly not running anything like full bore and from a rough estimate there would certainly not be drinking and cooking water for more than two to three thousand people per day. The gentlemen who accompanied us and who knew the condition of the place well, informed us that during the main festivals the water is so scarce that the Teppakulum itself is used as a source of drinking supply. These gentlemen also informed us that on ordinary occasions this tank is used for bathing purposes as it is looked upon as sacred by the people of the neighbourhood.

It is difficult to imagine a more unsatisfactory arrangement than that a tank should be used for bathing purposes throughout most of the year and should be reserved for drinking at the time of a large festival. During heavy rains the water from the stream on the hills flows into two other tanks but these are always empty at the time when the water is more urgently required namely in the month of Adi. Two miles away from the temple enclosure the main Periar channel crosses the road. During the festival it is not uncommon for the people of Madura to make arrangements to bring water from this channel and either distribute it to the pilgrims free as an act of charity or to sell it. The Committee consider that the existing water-supply arrangements are a menace to the health of Madura and the immediate neighbourhood. From a rough examination of the surroundings of the temple compound and the spring itself, we consider that it is highly improbable that the amount of water to be obtained from the original spring could be largely increased. Further more, we consider it very doubtful whether the sinking of wells in the neighbourhood is likely to materially increase the supply of good water. There is little or no indication that water is plentiful in any spot near the temple, consequently if it is decided to search for a further supply of ground water by means of boring, a considerable expenditure is likely to be required the benefit of which seems very doubtful. It no doubt is true that it is only in the month of August or Adi that the demand for water is very greatly in excess of the supply. In spite of this fact we consider that the urgency of the case is so great and that the danger to the town of Madura and the district as a whole is so real, that it would be worth while to provide a small installation to supply the temple compound and the road leading to it with water from the Periar channel. This could probably be easily arranged and at no very great expense by means of a small pumping plant near the canal. Water should be forced through a mechanical filter up to the masonry tank already situated in the temple compound. An alternative suggestion to this would be to make a small storage and settlement tank close to the canal, capable of being filled by gravity, and to pump this settled water up to the reservoir. Two or three hydrants should be provided on the road leading to the temple. The installation should be as small as is compatible with efficiency and might only be worked on the more important festival days or at times when the spring water is insufficient for the ordinary new moon festivals of the place.

Conservancy.—We have already described the sanitary condition of the temple compound and from what has been said, it is obvious that the ordinary conservancy arrangements are extremely deficient. At the time of festivals the condition must be much worse. We are however informed that during these festivals some temporary arrangements are made by the Tahsildar, who is present during the festivals, and who has a small sum of money at his disposal for this purpose. The arrangements made consist mainly in providing temporary latrines and importing some sweepers and scavengers from Madura. We consider that the existing condition of the place is sufficiently bad to warrant recommendations, that a considerable increase of sweepers and scavengers be made at once, that rubbish and cow-dung, etc., be regularly removed to the outskirts of the enclosure and burnt and that a few latrines be provided of a moveable type for general use.

Housing accommodations for pilgrims.—The visitors to the temple are for the most part people resident in the immediate neighbourhood; consequently even on the large festivals a very fair number of the visitors return home the same night, the remainder either obtain shelter in the various mandapams or sleep in the open. At this time of the year rain is improbable and there can be little or no hardship from this arrangement. We do not consider that it is necessary to build large temporary shelters as the accommodation in the mandapams is fairly adequate. We should, however, like to point out that several of these mandapams are falling into a state of disrepair and we have doubts as to the safety of some of the buildings particularly the one containing the statue of Tirumal Naik. We consider that it is desirable that skilled advice should be taken on this point and that such action as may be found to be necessary should be taken. The mandapams should be put in a much better state than they are at present.

Food supply.—The food supply at the festival is probably adequate because for the most part the pilgrims bring their own provisions supplementing these by

small purchases. We have already pointed out that owing to the insanitary condition of the compound generally the conditions under which food is sold are extremely bad, largely on account of the great number of flies present. By proper conservancy arrangements this defect will be considerably reduced, but vendors of food at the festivals should be made to protect their goods from flies by wire gauze or net work covers.

Considering the number of pilgrims who visit Alagar Koil both at festivals and on other occasions we consider that the road between Madura and the temple should, if possible, be kept in a better state of repair. At the time of our inspection the last three miles of the road were in a very bad condition.

RAMESWARAM.

Population, 1901	..	Males	3,349	6,632
		Females ..	3,283	
,, 1911	..	Males	4,439	8,316
		Females ..	3,877	

Birth rate per thousand of population, average of last five years 99·2.

Death rate per thousand of population, average of last five years 143·3.

There are four principal festivals in Rameswaram occurring annually in the months of Thai, Masi, Adi and Mahalya. The average numbers said to attend on these occassions are 10,000, 3,000, 20,000 and 2,000, respectively. At first sight these figures appear extraordinarily small, especially when it is remembered that Rameswaram is to the Hindu one of the most holy spots in India, ranking in sanctity with such centres as Puri, Benares and Hardwar. It is, however, rather as a place of pilgrimage than as a festival resort that Rameswaram derives its importance and in considering what arrangements are necessary for the comfort and health of the pilgrims this fact must be prominently borne in mind. We have not to deal here with problems such as arise in towns where enormous crowds of people congregate for a few days at long intervals, but rather with those peculiar to a small and rather lonely little place, the temple of which is visited by pilgrims continuously all the year round. They come as a rule in fairly manageable numbers but the important fact to remember is that they come constantly and that they are drawn from all parts of India.

The advent of the railway has increased the tendency to diminish the importance of the particular festivals and to spread the arrivals and departures of pilgrims throughout the year. From the point of view of the sanitation of the place this is an advantage but the risk of infection being conveyed rapidly from place to place and to very distant places in a short time is a serious factor on the other side. Practically all pilgrims now come to Rameswaram by train and many of them are poor, infirm and old. It is calculated that nearly a quarter of a million strangers visit the place every year. The point therefore upon which the Committee wish to specially lay stress is that all arrangements made for their accommodation should be permanent in character and should be constantly under good skilled supervision.

The Committee doubt whether this point has hitherto been adequately realised. The administration of Rameswaram is the ordinary one of a small Union: the Taluk Sanitary Inspector visits it during festivals and occasionally at other times in the year, but only when specially ordered by the District Medical and Sanitary Officer: there is a small hospital and dispensary: the number of public latrines seems reasonably sufficient and private conservancy is shortly to be introduced, but there is practically no control over lodging houses and no permanent superior sanitary staff to supervise conservancy and general sanitation.

The Committee consider that in the peculiar circumstances of Rameswaram much more is required and recommend that the place should be regarded as of such importance as to deserve special treatment.

What this special treatment should be, it is perhaps a little difficult to clearly indicate. The Committee at first considered a suggestion that the Union should be abolished and that a special sanitary staff working directly under the President, Taluk Board should take its place, special regulations being passed for its appointment, organization and payment. On the whole, however, we consider that there is perhaps not sufficient reason to recommend any radical change in the method of administration but we desire to insist on the necessity of the executive staff being extended and put under a skilled, capable and energetic sanitary officer. What his exact qualifications should be, may be a matter for subsequent determination, but whether he is to be a Health Officer or merely a superior Sanitary Inspector, it is obvious to us that he should be permanently appointed and should be specially selected and therefore relatively highly paid. He should have one or

two assistants under him and an adequate staff of sweepers and scavengers and when, on special festival occasions, it is necessary to appoint temporary staff, this should also be under his charge. The figures of birth and death rate quoted at the head of this note appear to us in themselves to establish the need for a permanent sanitary officer. The averages are obviously calculated on the resident population, but their magnitude indicates that the fluctuating population must be practically throughout the year from two to three times in excess of the residents and from a perusal of the booking returns of the railway we find this to be the case. There is a constant influx into the town of from 10,000 to 20,000 people per mensem : in July it generally exceeds 30,000. The town, therefore, usually has a floating population which makes it comparable in numbers to a small Municipality rather than to an Union and it should be staffed accordingly.

It is by no means only to public conservancy that the Sanitary Officer, if appointed, will have to pay attention. We consider that his first and most important duty should be the inspection and control of lodging-houses, of which there are nearly 600 in the town, kept directly or indirectly for profit, as well as a number of choultries maintained by the charitable for the free accommodation and entertainment of the poorer classes of pilgrims. To bring these institutions, particularly the former, under adequate control, we consider to be of paramount importance, and to this end they should undoubtedly be licensed and made to conform to certain minimum standard requirements in the way of room capacity, whitewashing, lighting and ventilation, latrine accommodation and water-supply. A license generally connotes the payment of a fee and whether the charitable institutions are to be taxed or not—a point on which there is some difference of opinion—we are clearly of opinion that houses kept for profit should pay a fairly substantial fee per head of the maximum number for which the house is licensed, and that part at least of the expense of the up-keep of the sanitary staff should be met from this source.

We understand that when the District Boards Act comes to be revised, it is proposed to insert a provision, making lawful the extension to any Union any provision of the District Municipalities Act and that the latter Act will contain provisions for making lodging-houses, etc., licensable. Whatever the exact form of enactment decided upon, what we hold to be essential is that lodging-house-keepers in such a place as Rameswaram should take out a formal license which would be granted by the President, Taluk Board, when the house is certified by the Sanitary Officer to comply with specified requirements; that they should be subject to inspection ; that penalties should be imposed for failure to comply with the conditions of the license ; that they should keep a register of the number of persons staying in the house and should be under obligation to report to the sanitary officer all cases of death or serious illness, whether infectious or not, immediately it occurs. We consider this matter of notification of disease of very special importance. There may no doubt be objections to making such notification generally compulsory in a Union or even in a Municipality, but we can see no reason whatever why this should not be done in the case of lodging-house-keepers. Such a rule is essential, if effectual measures are to be taken to prevent the spread of disease among a wandering population.

Infectious disease.—Cholera. The Committee were surprised to find how few cases of cholera are actually recorded at Rameswaram. There have been, we are informed only 352 deaths in the last seven years and never, except during the Adi festival of 1912 when 80 attacks and 61 deaths occurred, has it approached the dimensions of a serious epidemic. It is quite possible that the existing registration is defective but Rameswaram cannot, we think, be regarded as in any sense a hot bed of cholera. It is at the same time very important to remember that a cholera patient apparently cured is a source of infection for a considerable period after he is well enough to travel, and that the disease can therefore be rapidly communicated to different places with the increased facilities for travel by rail. Even therefore if the actual numbers of deaths occurring in the place are small, in the special circumstances of Rameswaram peculiar care should be taken to treat patients and if possible to detain them for some days after recovery. The District Medical and Sanitary Officer told us of a party of some 70 Malyalis who last February got cholera at Srirangam, and then came on to Rameswaram ; more of them were attacked there and 4 died at Devapatam after they had left the place

One such party is sufficient to spread the disease over a large portion of India, yet at present no special record is made of their movements nor is intimation given of their arrival at and departure from, any particular place. We think that it should be made a rule that the Sanitary Commissioner should be specially informed by the Health Officer, or the Municipal or Union Chairman as the case may be, of any such case as that above mentioned. The Sanitary Commissioner could then communicate with the district authorities and see that the further movements of the party were specially watched and necessary precautions taken.

Malaria.—Rameswaram appears to be one of the few places in this portion of India where malaria is a serious factor. The subject has recently been studied by the Malarial Research Officer of Madras. He finds that in pits and pools, used and unused wells, *A. neigerrimus, listoni* and *culicifacies* are very frequently met with and some other harmless varieties are also found. The spleen rate of 560 children show that 30 per cent. of these have some enlargement and that the parasite rate on 86 blood films works out at 26·7. These figures are sufficient to show that malaria is a point which must not be neglected in the town. The number of breeding places are relatively few and consist almost entirely of wells, public and private. It is these wells which according to the report are responsible for the prevalence of *A. culicifacies* and *listoni* and considering that not one in ten of these wells gives a satisfactory drinking supply, as soon as the filtered water-supply is available many of these useless wells should be filled up with sand. This itself will cause a great amount of reduction in the malaria of the town. Such wells as cannot be filled up must be carefully and adequately protected.

Water-supply.—Rameswaram is situated on a long island which is in reality very little more than a sand bank situated on rocks of coral formation. The land is sandy and sterile and produces nothing but cocoanut palms and a little scrub vegetation. The mean level of the ground is very little above that of the sea. The rainfall is about 23 inches. In all places of such a nature there is a small bubble of fresh water on a superimposed layer of salt. We were informed at our inspection that by far the majority of the wells contain more or less salty water. Those that possess fresh water are mostly shallow and the water being obtained at the depth of usually less than 12 feet, deeper borings than this almost invariably strike water which is unfit for drinking purposes. Indeed so much is this the case, that several of the wells in the town which formerly used to be considered sweet are now slightly saline. The existing water-supply is therefore very deficient in quantity and bad in quality. There are probably not more than 20 wells in the town that yield anything like potable water. Many of the wells in the temple compound are looked upon as sacred and are much sought after by the pilgrims All wells in the town possess the usual disadvantage of this class ; they are by no means immune from pollution of the soil in the immediate neighbourhood and the possibilities of direct pollution by people dipping their *lotas* into them are very considerable. Practically none of the tanks are fit for drinking purposes and none are so used. We may therefore sum up the whole situation by saying that probably under the most favourable circumstances, two gallons per head of the population of a water which is very liable to serious contamination, is all that is available in the town of Rameswaram. Government have recognised the importance of providing the town with a piped supply and a scheme calculated to cost about 1½ lakhs has been drawn up. The scheme consists of acquiring about 400 acres of ground which has been carefully investigated by sinking borings and it has been found that in this area fresh water exists at the depth of about 15 to 25 feet. At this depth there are some layers of coarse sand. It is proposed to make 6 wells about 100 yards apart, to connect these together with underground pipes and pump the water from these wells into a service reservoir situated on a piece of high ground in Rameswaram round the borders of the area where fresh water is to be found. Trial wells are to be sunk so that it will be possible to observe if the salt water encroaches on the area when large quantities of water are removed. It is hoped by this means to provide about 70,000 gallons a day for the town.

We have carefully inspected the ground where it is proposed to construct the wells and we can only express the hope that the wells will yield sufficient fresh water. If, as is expected, the fresh water is dependent on the rainfall and does not come from springs, great care will have to be exercised with the pumping so as not to draw salt water into the wells.

Conservancy.—There are 20 permanent public latrines of a very fairly satisfactory type. We inspected a large number of these and found that there was less nuisance from them than from many hand removal latrines we have seen. During the festival times a large number of temporary tatty latrines are also provided in various suitable situations in the town. Many of the private houses and lodging-houses have a primitive sort of latrine attached to the premises ; these for the most part are both deficient in number and kind. An improvement which is in the right direction has recently been introduced, namely the opening of sweepers' passages along the back of the houses in the main street. This is a very sound sanitary precaution and it will be now possible, with the aid of these conservancy lanes, to insist on the lodging-house-keepers and choultry managers providing adequate latrine accommodation and keeping these properly conserved. From a careful inspection of the town of Rameswaram we are very decidedly of opinion that a drainge system is hardly suitable for a place of this nature. Whilst we are conversant with the many disadvantages of the hand removal system of night soil—a system of which for the most places we thoroughly disapprove—we feel that it is the only one that it is really suited to Rameswaram at present. There is one special reason why it is more likely to be successful and also likely to be less of a nuisance and danger in Rameswaram than in other places. This is on account of the large amount of sand available; by making use of sand in latrines both private and public, a considerable amount of the nuisance can be done away with and it only requires a good system of sanitary supervision to keep the latrines in a reasonably satisfactory condition. Even when a pipe water-supply is provided we do not think that it will be desirable to instal a water carriage system for the removal of night soil. The consequence is that the sanitary arrangements must be very carefully drawn up and supervised ; there must be an adequate supply of sweepers both for private and public latrines, a fair number of carts for removal of night soil, staff on a very liberal scale and the number of scavengers for keeping the streets clean must also be in excess to what is usually considered sufficient. We consider that every public latrine should have its own sweeper, that each sweeper attending to private latrines should not have to serve more than 20 latrines and less when the houses consist of choultries where the number of residents is considerable. One of the requests made to us by the local residents was that Wadder sweepers should be employed for scavenging private latrines. Another was that the ends of the conservancy lanes should be closed by gates so as to prevent thieves finding their way into the backs of the houses at night. These are details which are more in the province of the local authorities than of the Committee and we can only commend the points to their consideration.

Hospital Accommodation.—We inspected a new hospital and dispensary and consider that the buildings are satisfactory as far as they go. It has been remarked by the Surgeon-General that it will be necessary to employ both a male and female doctor and also that the only accommodation available for in-patients is a small block of buildings consisting of six wards which has been paid for by the Devasthanam to be used entirely by certain castes. As the Surgeon-General points out it will practically be impossible for the hospital to fulfil its proper function until such time as accommodation is provided for the treatment as in-patients of poor people of the lower orders of society : we recommend that this want should receive the attention of the District Board and that the necessary ward accommodation be provided as soon as possible.

A cholera shed for infectious disease is also provided but seems too far distant from the hospital.

Railway Accommodation.—As the numbers of pilgrims arriving at any one time are never very excessive we do not consider any special arrangements necessary at the station. We may, however, mention that requests were made to us that a further waiting shed should be provided by covering in a portion of the open platform, also that an early train leaving Rameswaram for Daneshkodi before 6 A.M. and returning before noon would much facilitate the bathing of the pilgrims at the latter place. The latter point especially we commend to the favourable consideration of the Railway authorities.

Choultries.—Probably the majority of pilgrims at Rameswaram find shelter in the lodging-houses, but there are also some large choultries erected by the charitable for the entertainment of the poor. These are generally endowed and are on the whole we think satisfactory.

We were shown a site near the hospital on which a dharamshala is to be constructed at the expense of Rai Mahabeer Prasad Singh Bahadur. It thus appears that private charity is not exhausted in the matter of providing shelters for pilgrims and we are not prepared to recommend that this should in Rameswaram be regarded as a necessary object for Government assistance. The rest house already provided by the Local Board seems to us to have been on a very expensive and not altogether suitable design and we think that provision of such shelter should, wherever possible, be left to private effort.

DANESHKODI.

Daneshkodi is situated on the same island as Rameswaram about 12 miles from that town and about 2 miles from what is known as " the Point " which is the place where the sandy island juts out into the sea. It is this spot which is regarded as specially sacred and it is the duty of every good Hindu after visiting Rameswaram to proceed thither to bathe in the sea.

Rameswaram, as has been mentioned, is not a large town; Daneshkodi is nothing but a village—a poor miserable little hamlet. It has, however, quite apart from pilgrim traffic, suddenly sprung into importance now that it has been made the terminus for the connection between India and Ceylon. It is therefore likely to grow and should be carefully planned. A beginning has already been made by the provision of quarters for the various Government departments, Customs and Railway staff. This newer portion of the village forms a striking contrast to the rest of the place, where the buildings are mostly thatched huts of the most primitive description, ill-arranged and huddled together in the sand with practically no street formation. The permanent population including Government and Railway employees is only, we understand, about 1,150 and the number of houses but little exceeds 400. It seems strange to talk of congestion in such a place but congestion undoubtedly exists, there is very great danger of fire and practically no possibility of conservancy. Fortunately the ground is excessively sandy and night soil probably soon gets buried: and even with a considerable floating population, the risk of infection from bad conservancy is therefore not perhaps so great as might be imagined. The Committee do not see how any improvement in sanitation can be brought about with the existing arrangement of houses in the village and strongly recommend the acquiring of all the houses, pulling them down and laying out the hamlet on sanitary lines. We think, it would be well worth while for Government to make a special grant for the improvement and expansion of the place.

Accommodation for pilgrims.—There are about 60 houses belonging to Purohits which give temporary shelter to pilgrims. With one or two exceptions these are dark, insanitary and evil smelling: the floors are not pucca: there is no latrine accommodation: usually a shallow well 3 or 4 feet deep is found either in the house or the sandy back yard and contains slightly brackish water. By far the larger number of pilgrims resting at Daneshkodi go, however, not to lodging-houses but to one of the two large choultries. One of these the Tanjore choultry, is under the official management of the Ramnad Taluk Board and is reasonably satisfactory. This is situated some distance from the rest of the village: it is very close to the sea and seems in danger of being eventually washed away. The out-houses of the building are not so good as the permanent structure: should it be found advisable or necessary to renew them, the Committee would recommend something after the nature of the excellent sheds put up by the Ceylon Labour Commission at Mantapam as a good type to copy.

The other choultry is maintained by the Natta Kottai Chettis and is handsomely endowed. The Committee can well believe that this charity is much appreciated by the pilgrims: no register is maintained of the attendance, the only account kept being as regards the quantity of food stuffs used, but it is a very large place and anything from 300 to 1,000 persons are said to be fed there every day: in addition sometimes as many as 500 more come and cook their own meals. On ordinary days about 200 people are said to sleep in the place and the number may approach 1,000 on festival occasions.

The Committee regret to have to criticize adversely such an admirable institution, but they are bound to observe that the choultry is anything but a model

of cleanliness. It is an old building full of rambling court yards and passages, dark and dismal and divided in places into partitions by dirty gunny bags. There are three wells, two inside the building: people use their own pots for drawing water and the sandy surroundings seem to be not infrequently used for purposes of nature. The latrine accommodation is of the scantiest and the sweeping and scavenging staff maintained most limited. The institution is understood to employ one male toty for the exterior and five women sweepers to clean up the interior. The Taluk Board also supplies two permanent and at festival times 8 or 12 temporary scavengers. The place looks as if it was very rarely white-washed and its general condition seems to the Committee to be the very reverse of sanitary. Since our visit a bad outbreak of cholera has occurred and nine cases were removed from this choultri.

We think that if the sanitary officer we have recommended for Rameswaram be appointed he should be required to inspect at frequent intervals Daneshkodi also, and we consider that this choultry should be formally licensed, whether with or without fee, and should be brought under the same regulations as we have proposed to be applied to lodging-houses.

Conservancy.—A few temporary latrines and some palm leaf structures which are said to be permanent are to be found in Daneshkodi but there can be little doubt that the ground in the immediate neighbourhood, and the streets, are used in the early morning as latrines. The sandy nature of the soil renders the amount of nuisance very much less than one would imagine. An inspection shows that both private and public latrines are not used but the neighbourhood is frequently very highly fouled.

Water-supply.—The water-supply of the place is lamentably deficient. All the houses belonging to the Government Departments are supplied by the railway company with water brought from Pamban. Tanks are placed on convenient situations in the streets and these are filled up daily. The system is open to very grave objection but it is the only one possible in Daneshkodi. The surface wells that do exist in the town contain very bad water.

Probably the most urgent need of the place is a good and pure water-supply. We see no prospect whatever of finding this in the neighbourhood. We do not consider that the supply at Rameswaram will be sufficient to provide Daneshkodi with water: in fact it appears to us doubtful whether the proposed scheme will really be adequate for the town of Rameswaram itself. For the time being undoubtedly the arrangement of bringing water by train will have to remain. Should Daneskodi grow considerably the advisability of obtaining a supply from the mainland will have to be considered.

Bathing arrangements at the Point.—The Committee inspected the bathing arrangements at the Point and considered the necessity said to exist for the provision of a shelter at this place. On the whole they were not satisfied that anything of the sort is essential and think that if it is, it should be left to private charity, the District Board possibly co-operating by supplying funds for acquisition of the site.

Hospital accommodation.—The railway company have provided at Daneshkodi a small hospital and also isolation sheds.

These, however, are entirely insufficient for the needs of the place and we strongly recommend that a well equipped dispensary, with necessary accommodation for treating cholera, be provided at an early date. Apart from its religious importance Daneshkodi is rapidly growing in size on account of its being the terminus of the railway and since our visit a serious epidemic of cholera amongst the railway coolies and pilgrims has broken out and it will be found that the place is very badly equipped with the various necessities. We are strongly of opinion that the further medical arrangements mentioned above are very necessary.

The Committee were unable to visit two other small places in the neighbourhood of Rameswaram on the mainland namely, Dharabhasayavam and Devipatnam. Both these places are visited by pilgrims from Rameswaram to a more or less extent and from all accounts both places require a great deal of sanitary supervision. We therefore suggest that one capable officer should be put in charge of Rameswaram, Daneshkodi and these two places, to see the sanitary administration of all. At Rameswaram he will require the assistance of a special Sanitary Officer.

TIRUCHENDUR.

Population 1901	..	Males	16,953
		Females	9,103
,, 1911	..	Males	15,695
		Females	8,809

Birth rate per thousand of population average of last five years, 10.

Death rate per thousand of population average of last five years, 9.

Festivals—

1.	Poosam	January-February ..	300 to 500
2.	Masi	February or March ..	20—25,000
3.	Visagam	May	40—45,000
4.	Avani	August	8—10,000
5.	Kandasashti ..	October or November ..	4—5,000
6.	Tirukarthigai ..	November or December	2—5,000
7.	Last Friday in each Tamil month		500—750.

It is a Union Town and the headquarters of a Taluk.

Tiruchendur, beautifully situated on the seashore about 35 miles by road from Tinnevelly, contains the most important temple in the district. No less than 7 annual festivals are celebrated here : only two, Masi and Visagam, are, however, of much importance. The Masi festival lasts for 12 days, the 7th day being the principal day of the feast. Visagam on the other hand lasts only one day but is very largely attended. In connection with the Masi festival an annual cattle fair is also held.

The census figures cannot be said to accurately represent the permanent population as the census was taken in March and included many of the pilgrims who had come to the Masi festival. The Union Chairman informed us that the town does not usually contain more than 10,000 inhabitants and he puts the average birth and death rates at 22·3 and 22·1 per thousand, figures which seem far more probable than those based on the census figures.

Housing accommodation.—Unlike Rameswaram, Tiruchendur is not a place much visited by pilgrims throughout the year : they come in large numbers to the chief feasts but at other times the town is a quiet and sleepy place. Practically the whole of the permanent population, however, is dependent on the pilgrims for their support, living on the boiled rice which is offered to the god and afterwards sold at very moderate rates by what are known as Katligars. These Katligars are a prominent feature of the place. They are Brahmans who, being resident at Tiruchendur, perform certain ceremonies at the temple by proxy for distant clients. The clients make payment either in kind or in money and for this payment have a right to be accommodated in the houses owned by the residents when they choose to come to Tiruchendur to pay their vows themselves. The result is that these houses are not in the true sense of the word lodging-houses in that they do not take a large number of pilgrims on payment. The various clients of the Katligars send intimation when they intend to visit a festival and accommodation on a much larger scale than that provided for the ordinary pilgrim is kept for them. If, however, by any chance none of the regular clients appear at the festival, the house is then let much in the same way as an ordinary lodging-house. Many of the Katligars have two houses—one in which they live themselves and receive their regular clients and the other which they let out on hire. The number of these Katligars' houses is between 600 and 700. We were informed by the local officers that there are not more than 40 or 50 true lodging-houses ; these being mostly used by the people of the lower castes. The lodging-houses and the Katligars' houses mentioned above vary very greatly in size and in accommodation. By far the majority of them are comparatively small, rather dark but fairly well built. Behind the houses nearly all have a courtyard in which a small well is built, the water of which is used for bathing purposes as it is salty and unfit for drinking. Practically none of them have

latrines. At festival times all houses, other than the Katligars' entertaining their regular clients, are considerably overcrowded.

The majority of the pilgrims attending the festivals find accommodation, however, not in houses but in matams, of which there are about 100, each being owned and used by a particular caste. The matams are unendowed and most of them have no regular manager or attendant. The majority of these places are not built on the usual lines of a house but more nearly resemble a mandapam, that is to say, they are open on one or two sides and sometimes they consist of a roof supported on stone pillars. The minority, however, belonging to the wealthy castes, such as the Nattakottai Chettis, in every respect resemble the choultries or rest houses we have seen in other places. They are masonry buildings divided up into courtyards and in a few instances they possess good latrine and bathing accommodation. In spite of all the accommodation mentioned above quite a large number of pilgrims are entirely without any shelter whatever. This is especially the case with the lower classes. Tiruchendur is by no means as exclusive a temple as some others and Nadars, Chucklers, Pariahs and Pallars flock to the festivals in large numbers, and are even allowed to approach the outer precincts of the shrine. They usually camp in two places, one in the immediate neighbourhood of the wells near the Avudaiyarkulam and the other on the sand dunes round the temple. In the former place there is shade from large trees but in the latter there is none whatever and although no one complains of the hardship of sleeping in the open they undoubtedly suffer considerably from the lack of shade during the middle of the day, as the chief festivals occur in the hot months. We recommend therefore that some shelters of a permanent nature be erected near the temple at the public cost as they are not likely to be provided by charity. It is not intended that these shelters should be elaborate structures divided into rooms but they should, we think, consist of a plinth and a roof supported either on iron or stone pillars according to the form which is found most suitable. A drinking water-supply is very necessary in the neighbourhood of these shelters and if such can be provided they will be very popular. The present arrangement of pilgrims camping in the immediate vicinity of the only drinking supply of the town cannot be considered very desirable and further the pilgrims themselves would very much prefer to be in the neighbourhood of the temple, if water were available there, rather than have to halt near the tank. The reason for the encampment near the tank is simply and solely on account of the difficulty of obtaining sufficient water in the neighbourhood of the temple.

Water-supply.—These remarks naturally bring us to the important question in Tiruchendur namely, the water-supply. Tiruchendur is situated on a small promontory of sand and the whole of the town is really built on a foundation of sea-sand. There is no subsoil flow of water towards the sea in the neighbourhood as far as can be ascertained; the consequence is that all the wells in the town and those built to the south side of the temple on the seashore give salt water if they are used to any extent. The principal source of water-supply for the town is drawn from the 20 wells constructed immediately round the Avudaiyarkulum tank. This tank is fed by a channel taken off from the Tambrapani river. When the tank is full there is a large supply of water available either from the tank itself or from the 20 masonry wells in the neighbourhood. During the festival, however, which takes place in the hot weather, it is unusual for the tank to contain much water; consequently the wells are low and it is on record that during the most crowded time, that is, the 7th day of the Masi festival, the wells have been drawn dry, though, during the following night, they partly filled up. This fact and a study of the behaviour of other wells in the neighbourhood show that this supply of water is a limited one, the wells being sunk in a pocket which is entirely dependent on the water from the irrigation channel; they are not fed by true subsoil springs. The normal fixed population of the town being about 10,000 inhabitants, the supply from these wells is sufficient in the non-festival season, but it must be remembered that the distance that the water has to be carried from the wells is considerable, varying from one to three furlongs according to the situation of the houses. If the 20 wells were used as a source of supply for a small distribution scheme the amount used in the town would go up considerably and for some period of the year the supply would be very inadequate. In an ordinary year the wells could probably not supply more than 2 gallons per head of the population.

Intimately bound up with this question of water-supply is the study of the cholera figures in the town itself and the district. The Tuticorin sub-division of Tinnevelly district has a very evil reputation from the point of view of cholera. We are informed by the officials and the residents that cholera almost invariably begins to prevail soon after the north-east monsoon sets in, that is to say, the months of December, January and February are especially the cholera months. It must be remembered that a very large proportion of the district is highly irrigated from the Tambrapani and there seems to be little doubt that the infection is spread through the water channels far more than by the intercourse of human beings. This probably accounts for the fact that the Tiruchendur festivals do not seem to have much to do with cholera epidemics. The festivals take place after and not before the cholera season and the number of cases occurring in Tiruchendur itself, if the figures are to be trusted, is curiously small. We have examined the figures of the last seven years and find that the number of deaths throughout the year in no case exceeded 31 : in two of the seven years it was nil, while except in 1911 and 1913 there were no attacks at all during the festivals. Cholera therefore appears to be comparatively a small danger in the town. We have seen that the principal reason for this is that all the main festivals take place in the hot weather when the district itself is largely free from cholera; an additional reason is doubtless that the drinking supply is drawn from wells and not from irrigation channels. The low cholera death rate is therefore the result of fortunate circumstances but must not be taken as an indication that the water-supply is good and adequate. On the contrary we consider that the water-supply of Tiruchendur is deficient in quantity, is very liable to pollution and so inconveniently situated as to give a great deal of trouble both to the local residents and to the pilgrims. We are informed that it may be considered as certain that sooner or later a railway will run from Tinnevelly to Tiruchendur; this will considerably increase the demand for a good water-supply. We therefore are strongly of opinion that it is necessary to provide the town with a protected and ample supply. We discussed this matter with the Sub-Collector and with the local residents and we consider that there would be no particular difficulty in providing a supply on the following lines. One of the terminal channels from the Tambrapani ends in two tanks, (1) the Avudaiyarkulam, which as we have already stated provides the supply for Tiruchendur, and (2) the Ellappanayakkankulam which lies somewhat further to the south. There is a large amount of surplus water from the latter which floods a considerable area : this water eventually finds its way into a small river. Much land is, we are told, rendered entirely useless for agricultural purposes on account of the flooding. We are, then, of opinion that it would be possible to construct a storage tank somewhere on the feeder channel of the Avudaiyarkulam, if necessary stopping the surplus water of the Ellappanayakkankulam in order to fill it. This tank should be filled up by gravity as much as possible and should be supplemented by being pumped full before the channels become dry; water might then be pumped into the town and distributed into pipes. The scheme sounds more formidable in a description of this kind than we believe it would prove in reality. There is certainly no lack of water; as already stated a great deal is wasted. The storage tank might be somewhat of a difficulty but it could be rendered water-tight by puddled clay or bitumen sheeting. The main argument that will probably be brought against this proposal is that the town is hardly worth so great an expenditure. This, however, we consider is hardly valid, particularly in the light of the fact that Tiruchendur will shortly be on the line of rail and is likely to increase in importance. The normal requirements of the town are not very great, so that a comparatively small plant will suffice.

Conservancy.—A good deal has already been said about the housing arrangements in Tiruchendur. The Union Chairman informed us that several inhabitants have approached him with the request that a better system of private scavenging should be started in the town and they have wisely suggested that the first step in this direction should be the opening of sweepers' passages at the back of the houses. There are now only about 25 private latrines in the town conserved by the Union staff. The Committee are strongly of opinion that it would be well to increase the number of private latrines considerably, and to have them all conserved by the Union. We are also of opinion that the first step is to acquire sweepers' passages to enable the latrines to be cleaned from the back of the buildings. An inspection shows that there will be little or no difficulty about this proposal. It is admitted by all

who know the town that after a festival it takes some time before the town is reasonably clean, the immediate surroundings, streets and particularly the by-lanes being used by the populace as latrines. This is bound to be the case considering that the number of latrines available, both private and public, is very inadequate. The ground in the neighbourhood of the matams, is usually more fouled than that nearer to the private dwellings and it is obvious that more latrine accommodation should be provided for them.

Health Inspection.—The Committee do not consider that there is any necessity, at any rate at present, to formally license matams, choultries or lodging-houses in Tiruchendur. As has been pointed out above, these places are not regularly used throughout the year and especially in the case of the matams there is no permanent attendant on whom responsibility could be placed.

Nor do we think that, at any rate till the advent of the railway, there would be sufficient work in Tiruchendur to justify the recommendation that a permanent Sanitary Inspector should be attached to the Union. We do, however, consider that one Sanitary Inspector for two taluks (which is all that the District Board are said now to supply) is insufficient, particularly when it is remembered how regular and severe cholera outbreaks are in the villages. We trust that at least one Sanitary Inspector per taluk will be appointed.

Hospital arrangements.—There is a dispensary in Tiruchendur in charge of a Sub-Assistant Surgeon. There is no permanent in-patient accommodation but cases of cholera and other infectious diseases are treated in temporary sheds when they occur.

Alwartirunagari.—The Committee passed through this place on their journey to Tiruchendur. Unfortunately the time at our disposal did not permit of a detailed inspection. We are, however, informed that it also is a pilgrimage centre for Vaishnavites (the temple at Tiruchendur is Saivite). Alwartirunagari is in some ways more important from the point of view of the present inquiry than Tiruchendur in that its main festival is in Vikasi, one of the months when cholera is prevalent. It is a Union village confined between the Trambapani and one of the main channels taken off from that river. The inhabitants impressed upon us the need for more bridges over this channel and for the opening up and extension of the town. They are also anxious to have a dispensary. There is a dispensary at Srivaikantam, the Taluk Head quarters, on the other side of the river, but seeing that Alwartirunagari seems a dangerous centre for the spread of cholera, it may be worth while to establish a branch dispesary there, and in any case, we think, special attention should be paid to the sanitation of the place and the protection of its water-supply.

PALNI.

Population, 1901	Males	.. ..	8,097
	Females	.. ..	9,071
,, 1911 ..	Males	.. ..	6,399
	Females	.. ..	6,812
Birth rate per thousand of population — Average of last five years.		.. ..	46·58
Death rate per thousand of population— Average of last five years. ..		.. ..	48·82

Note.—There was an outbreak of plague in the autumn of 1910 when the town was evacuated. This possibly explains the large decrease in the census taken in March 1911.

There are two important annual festivals, *i.e.*, Thai Pushiam (January) and Pangunni Uthsavam (March-April) attended by about 10,000 and 20,000 pilgrims respectively. In continuation of the festivals which each lasts for 15 days, cattle fairs are held for 10 days. About 200-300 persons per mensem also visit the place throughout the year.

Palni, a small municipal town, is a very important pilgrim centre situated at the foot of the Palni hills 35 miles from the South Indian Railway at Dindigul. The boundary of the Coimbatore district is some 15 miles distant in the other direction. Pilgrims come from both sides and a large number of Malayalis come from the West Coast. There is no railway connection nearer than Dindigul. From Dindigul to Palni there are several motor buses plying for hire, but from the north pilgrims must either come by bullock cart, jatkas or on foot. The journey usually takes about three days for pedestrians. Along both the north and south roads chatrams are built at various halting places and at each of these wells are provided. These wells are disinfected by the District Board authorities before festivals.

Health of Palni.—Palni has always had a very unenviable reputation for cholera. The retur s for the last seven years are as follows :—

1908 .. 39—January 17, June 2, July 8, December 12.

1909 .. 296—January 213, February 44, March 22, April 12, November 5.

1910 .. 228—August 16, September 37, October 38, November 111, December 26.

1911 .. 127—July 2, June 126, August 1, December 8.

1912 .. 75—January 28, February 2, December 45.

1913 .. 251—January 84, February 6, March 18, April 53, May 71, June 19.

1914 .. *Nil.*

As in other Tamil districts the disease generally breaks out soon after the commencement of the north-east monsoon and dies down in the hot weather. The sharp outbreak in June 1911 is, however, noticeable. Diarrhœa and dysentery are also very prevalent diseases.

Water supply.—Palni owes its ill-health principally to the lack of a good water supply and considering the number of pilgrims who visit the place this is a menace to the health of the rest of the Presidency. The water supply at present is drawn from two main sources: (1) the Shanmugha Nadi river which is about a mile to the northward of the town, and (2) the main tank in the town. The river on the whole is a fairly satisfactory supply, but the difficulty of conveying the water thence in

carts is great, and it may certainly be stated that most of the low-caste and poor people do not get this supply but rely on the tank. Pilgrims usually go first to the river to bathe before ascending the hill on which the main temple stands. There seems to be no arrangement for separating drinking and bathing places. On inspection, we find, that bathing and filling of pots for drinking water seems to go on indiscriminately. The expense of bringing water to the town from the river is very considerable. The charge is usually either 4 or 6 annas per day for a large copper vessel full and in addition to this there is the tax for the cart which is payable at the toll gates belonging to the Municipality. It is obvious, therefore, that none but the wealthy can make use of this supply, poor though it is. During part of the year the river ceases to flow and there remains nothing but a chain of pools which are obviously very liable to infection.

The tank is primarily an irrigation tank and the water is not in any sense of the term " reserved " for drinking purposes. The catchment area is very large and is fouled indiscriminately by both human beings and cattle. Within the catchment area are situated three or four municipal latrines, the washings of which cannot fail to get into the tank during heavy rain. In a normal year there are always about two months when the tank is empty and small temporary wells are sometimes dug in the dry bed. It is evident that after rain and at times when the tank is low the water must be of an extremely bad quality and in reality entirely unfit for human consumption. In the town there are a certain number of wells, but by far the majority of these are unfit for drinking purposes on account of the salty nature of the water, and are used only for bathing and washing purposes. Our conclusion, then, is that the river water is deficient in quantity and liable to very serious contamination from bathing and washing of clothes and is situated so far from the town as to be really not used by the majority of people, while the tank water is for the most part of the year highly objectionable on account of fouling of the catchment area and is also deficient in quantity. It is, therefore, not to be wondered at that intestinal disorders are frequent and cholera is seldom absent for a long time. The Committee made some endeavour to find out where cholera usually comes from. Several theories were advanced: (1) that it is brought by the Malayalis from the West Coast; (2) that it is not infrequently imported by pilgrims from other parts notably from Srirangam; (3) that it originates in the town itself. Of the three, the last seems on the whole the most probable and, if so, this is undoubtedly due to the bad quality of water available in the town. It is this latter factor which constitutes so grave a danger to the rest of the Presidency. It is impossible to prevent pilgrims bringing cholera in the town, but with good sanitary arrangements and a protected water supply, the spread of the disease should be limited to personal contact only. Under ordinary festival conditions it may be difficult to get the sanitary conditions of a place so good as to make it impossible for the disease to spread by flies, dust, and contaminated food, but these methods of conveying the disease are of minor importance, in comparison with the infection of the water supply. Should that happen, cases will be extremely numerous and the disease is bound to be carried far and wide by the returning pilgrims. The Committee are, therefore, very much impressed with the urgency of providing Palni with a protected water supply. We understand that some investigations have been made in regard to this and a scheme for bringing water from the Palni hills at an expense of some 4 lakhs is said to be under consideration. This may seem a large sum for so small a place, but considering the importance of the town as a pilgrim centre we wish to urge that the preliminary survey, etc., be pushed forward as much as possible and that the work of construction be undertaken at the earliest possible moment. The Committee do not feel competent to criticise the particular scheme but would only remark that in a small and poor town like Palni a gravitation scheme would be most suitable and the proximity of the hills would also favour this. We are also given to understand that shortly Palni is likely to be linked up both north and southwards with a railway line. This will probably greatly increase the number of pilgrims to the town though it may decrease the numbers at the important festivals. The advent of the railway will mean that pilgrims who are infected with cholera at Palni will be able to travel long distances before they are attacked and it will greatly increase the area of possible infection from the town.

Provision of accommodation for pilgrims.—In the town of Palni by far the majority of pilgrims stay in choultries or matams, the majority of which are situated near the foot of the temple hill at a little distance from the town itself and are maintained and sometimes endowed by various castes. These places vary considerably as they do in other places. The most elaborate is perhaps that belonging to the Nattukottai Chetties, but a new one endowed by a Malayali lady also deserves favourable mention. The total number of matams is 80. Speaking generally, they are in a very fair state of repair and seem to be satisfactorily managed, the chief objection to the buildings being want of light. The larger matams have regular latrines of a somewhat primitive character, the smaller only erect tatty enclosures during festivals. About half are regularly conserved by the Municipality; those used throughout the year paying Rs. 1-8 per quarter for private scavenging fees, while those which are largely used only during festivals pay the ordinary household rate of 6 annas and a special fee of 12 annas during the festival quarter. The Committee are of opinion that all matams should be provided with a latrine of a permanent nature and that all of them should pay conservancy rates and be properly looked after. It is true that the matams are more crowded at the festival times than at others, but as a general rule a certain number of visitors are present throughout the year. Although it appears doubtful whether these matams should be put on the same footing as lodging-houses, it is very desirable for the Municipality to insist on certain minimum sanitary requirements, such as a tap (when the water supply has been constructed) a good latrine and a coating of white-washing once every six months.

General Conservancy arrangements.—Palni is a small municipal town of some 13,000 inhabitants and has some permanent public latrines. Three or four of these are situated within the catchment area of the tank. It is desirable that these should be removed and that other sites outside the catchment area should be selected to take their place. It is no doubt true that even if there were no latrines in this area the neighbourhood of the tank would continue to be used for purposes of nature, but the existence of the latrines probably only adds to the evil, their surroundings are liable to be polluted and after rain much foul matter is certain to find its way into the tank. This fouling of the tank is certainly one of the chief causes of cholera in the town.

Hospital accommodation.—At Palni there is a dispensary and a hospital with two wards of 4 beds each, 4 for females and 4 for males. There is also a small cholera hospital in the compound. This, as has been noticed in other towns, is very seldom used: all but the very poor receiving treatment in the matams or private houses. During festival times this cannot be looked upon as a satisfactory arrangement and endeavour should be made to bring pilgrims away from the crowded matams and to treat them in the hospital. The actual numbers of cholera in-patients during 1910, 1911, 1912 and 1913 was only 7, 5, 8 and 5, respectively. During the severe outbreak in June 1911 there was not a single admission to the hospital.

Maintenance of the road round the temple hill.—The Committee understand that there is some difference of opinion between the temple authorities and the Municipality as to how this road, which is of much importance to pilgrims, should be maintained. The Municipality think the temple should contribute and that the road being a public road should be kept up by the Municipality. The temple authorities are said to be willing to keep up the road only if it is made over to them and are not prepared to merely contribute to municipal funds. The question of the advisability of temples making contributions to public works which particularly affect them, is dealt with elsewhere in the report. Here it is sufficient to merely point out a concrete instance when such contribution would seem to be not impossible.

At the top of the hill there is a processional path round the temple, the sides of the path are steep and possibly rather dangerous. The need for fencing here was pointed out to the Committee. Whatever the proper agency for carrying out improvements at the bottom of the hill, those on the top should obviously be attended to by the temple authorities alone and at their own cost.

SRIRANGAM.

Population, 1901	Males	}	23,039
	Females		
1911	Males		11,683
	Females		13,116
Birth rate per thousand of population— Average of last five years			33·5
Death rate per thousand of population— Average of last five years			28·36

The great festival is the Vikemta Eckadesi occurring about December or January of each year. No exact record is kept of the number of pilgrims attending it, the approximate figures being given vaguely as anything from 30,000 to 50,000. Many go on to the cattle fair at Samayapuram about 5 miles from the town.

A fairly constant stream of pilgrims averaging 750 to 1,000 per mensem also visit the place throughout the year.

Srirangam is situated on an island between the Coleroon and the Cauvery. It is a very famous and sacred place, the town being almost entirely dependent on the temple. The main streets all run parallel to the square enclosure of the temple. There are three sets of the rampart walls. These walls are important because the houses are backed up against them and this greatly increases the difficulty of conservancy.

Water supply.—The water supply of Srirangam is mostly derived from either the Coleroon or the Cauvery and from some irrigation channels which run through the main body of the island and which are fed from one or other of the two main rivers. In some months of the year there is little or no water flowing in the rivers: when that is the case the pilgrims and townspeople have recourse to wells. The number of wells in Srirangam is fairly large, but they are not used to a great extent for drinking water, the people preferring the rivers. On the whole the water supply may be described as adequate and of fairly good quality. Of course no rivers or irrigation channels in which bathing and washing of clothes goes on indiscriminately can be looked upon as satisfactory, but in practice when there is a considerable flow of water in the river infection of serious disease is not common. Considering, however, the importance of Srirangam and the great ease with which a filtered supply could be provided, it is very desirable that a protected water supply should be installed. Government have already got prelim nary observations and estimates for such a water supply.

Housing accommodation.—Srirangam does not differ materially in its housing accommodation from most of the well-known pilgrim centres already described. Visitors can stay at one of three types of houses. (1) The large choultries, chatrams or matams of which there are about 33. These closely resemble similar institutions in other places visited by the Committee, but are generally on a better scale, some of them, such as the Rangoon Reddiar's choultry, being richly endowed and really handsome pucca buildings, well built and comprising a number of courtyards. In some of these all visitors are fed free of cost, in others pilgrims prepare their own food. (2) The lodging-houses, of which there are 7. The owners of these let off rooms to visitors and receive payment for them, but do not generally supply food. These places are much on the lines of an ordinary house usually consisting of three or four rooms, one opening into the other, ending in a courtyard which abuts on the rampart wall. In the courtyard or in some other portion of the house there is usually a well and a more or less primitive type of latrine is situated in the courtyard behind. (3) In private residences which are vacated by the owners and let for a few days or weeks at the festival period.

Food supply.—Pilgrims to Srirangam are on the whole fortunate in the matter of food supply. The temple uses a large quantity which is eventually available

at a reduced price for the consumption of the public. As already stated, some of the choultries belonging to private charitable individuals and some of the caste matams provide food gratis for visitors. There are several coffee clubs where light refreshment and coffee can be bought. These do not appear to differ from those we have already seen. They are usually small houses just like shops, often very dirty and with little or no sanitary accommodation. These are, as in other municipalities, licensed as places dealing in articles prepared from flour, but seem to be subject to but little control.

Conservancy.—Srirangam is a municipal town and the conservancy arrangements for pilgrims do not materially differ from those made for the residents except that the lodging-houses and choultries pay a special rate of private scavenging fee, Re. 1 per mensem as against 6 annas to Re. 1 per quarter for ordinary houses and for this are entitled to a double service. As, however, it is quite common for a fairly large percentage of the houses in the town to be let to pilgrims during the festival, we consider that it is legitimate to say something on the subject as a whole. A great difficulty about adequate conservancy arrangements in Srirangam is the fact that it is impossible to gain access to the courtyards at the backs of the houses, so that at present whenever latrines have to be cleaned the night soil has to be removed through the houses. In order to obviate this inconvenience a drainage scheme has been drawn up for providing conservancy lanes along the back near the rampart walls and for carrying away all the surface drainage by partly open and partly closed drains. There are 1,648 private latrines in Srirangam conserved or supposed to be conserved by municipal agency and it is common knowledge that these arrangements must be extremely defective until the drainage scheme is complete. We are given to understand that as soon as the conditions become more normal after the war there is every prosppect of the work being commenced. An early start is very desirable, for there can be no doubt that the completion of the drainage scheme will mean a marked improvement in the sanitary condition of the town generally.

Contribution of the Temple to conservancy.—This is practically nil. The Devasthanum employ 6 Tiruchetti-karar (sweepers, not scavengers) to clean the temple precincts and in addition pay Rs. 2 per mensem to one Wadder scavenger. They make no general contribution to municipal conservancy though they pay Rs. 15 per mensem to the Municipal Hospital. Even the special festival arrangements of 4 latrines and 4 toties within the temple premises are paid for by the Municipality. The temple is said to have but little margin of revenue on expenditure, the Mirasidars absorbing much of the income, but the Committee think they might possibly do more than they do in aid of the conservancy of the town which owes its importance to the temple.

Health of the town.—The cholera figures for the last 7 years are given below :—

Year.	Attacks.	Deaths.
1908	175	121
1909	68	55
1910	16	10
1911	44	35
1912	20	15
1913	16	10
1914	81	57

An investigation of the figures and the returns given at the hospital did not much elucidate the problem as to whether the disease is mostly brought in by the pilgrims or contracted locally. There is usually some cholera at the time of the festival, but the disease generally breaks out shortly before it, with the advent of the north-east monsoon. The first case in the last epidemic was that of a follower of the Swami of the Uttarathi Mutt who was on tour in the town during last October and occurred on 20th October 1914. This epidemic, therefore, may possibly be correctly ascribed to a visitor, but it would, the Committee think, be rash to assume that this is necessarily or always the case. However this may be, the Committee feel no doubt that with the better conservancy arrangements which will follow the opening of the

drainage scheme and with a protected water-supply, cholera should very much decrease within the town. Whether or no pilgrims are a direct source of infection, it should be remembered that it is usual for them to visit Chidambaram, Srirangam, Palni, Madura and Rameswaram in a sort of tour, and that not only is there a considerable danger of visitors taking the malady to their own homes and there starting epidemics, but they may convey the disease from one important pilgrim centre to another, thereby greatly increasing the danger to the community at large. We were informed for instance at Palni that much of the cholera infection has been brought there from Srirangam. Although we could find little or no evidence of the truth of this statement we wish to point out the necessity that exists for reducing the risk of infection of or by visitors, to a minimum by maintaining a high standard of sanitary excellence in Srirangam and by providing it with a protected water-supply.

Railway accommodation.—A large number if not the majority of pilgrims arrive by rail changing at Trichinopoly Junction and proceeding thence to Trichinopoly Fort, which is not far from Srirangam. The Committee inspected both these stations. The chief thing which attracted their notice was the inadequacy of the Indian railway refreshment room at the junction : the place is small and dirty, is said to be used only by 3rd class passengers, and should undoubtedly be enlarged and improved. It is doubtful, however, whether it is so much wanted for pilgrimage as for ordinary traffic. There is no refreshment room at the Fort station and the Committee do not think there is any special need for one. The District Board have plans for the erection of a large chattram close to the station and pilgrims can proceed there and get their food in the town.

The Committee heard a good deal about crowding of the trains discharging at the Fort station : this appears to be common not only during the festival but also at other busy times of the year. It is no doubt in a large measure inevitable in the case of a single line running through a populous country. The Committee do not feel that they have any special recommendation to make on the subject as regards Trichinopoly. The number of passengers alighting daily at Trichinopoly Fort during the festival appears to be from 1,750 to 2,000 and approaches 3,000 on the heaviest day. Special trains are run on the occasion.

KUMBAKONAM.

Population, 1901 ..	Males	28,650
	Females	31,023
,, 1911 ..	Males	31,327
	Females	33,320
Birth rate per thousand of population— Average of last five years		28·03
Death rate per thousand of population— Average of last five years		30·54

The Makham festival occurs annually about the end of February or the beginning of March. Every twelfth year it becomes the Mahamakham and is then of supreme importance.

During the last Mahamakham festival of 1909 about 818,000 pilgrims were present. The annual event attracts only some 5,000.

The Committee visited Kumbakonam because they did not feel that they could pass over a place where probably the most important festival in the Presidency is held even though it occurs but once in a dozen years. The arrangements, however, made on the last great occasion were so successful and have been so fully described in the correspondence read in G.O. No. 832-M., dated 22nd May 1909, that the Committee feel they have little to add and content themselves with only a few simple recommendations which in no way conflict with those at that time recorded. As noted by Government in 1909 " the entire absence of any serious epidemic, accidents or crime, in spite of the enormous concourse of people, and the general satisfaction which has been expressed with the arrangements for the festival prove that these arrangements were sagaciously conceived and admirably carried out. "

(1) The Committee were informed by those of its members who were actually present at the last festival that the secret of success was the cleaning out of the Mahamakham tank. We therefore strongly recommend that this be done again before the next festival commences. The Mahamakham occurs, however, in February and this is a particularly bad time to clean the tank as the north-east monsoon is hardly over and the level of the subsoil water is high. The best period for cleansing the tank is April or May of the year previous. If the operations are carried out at this time considerable saving in money for pumping charges will result. The Committee, therefore, strongly advocate that the water should be let out of the tank and that the whole of the mud should be removed down to the sandy bed in the month of April of 1920, the next Mahamakham festival being in February 1921. As to whether it will be advisable to clean out the Potamari tank also about this period may be left for the local authorities to decide nearer the time.

(2) In the light of experience gained in 1909 and also in the light of recent researches into the life-history of the cholera vibrio, we ascribe much of the success of the last festival to the complete stoppage of the flow of water in the Cauvery and the Arsalar and the careful patrolling of the rivers to prevent people taking water from small holes dug in the sand. We wish to particularly draw the attention of future officers, who may have to arrange for this large festival, to the great importance of this sanitary precaution and we consider that no consideration should allow a departure from it. The closure of the rivers renders the provision of tube wells down their banks an important and necessary measure. A sufficient quantity of such wells should certainly be provided on future occasions.

(3) We are informed that the Municipality proposes to acquire and remove several dilapidated buildings situated at the south-east corner of the Mahamakham tank with the object of increasing the amount of open space at this point where the crowd is densest during the festival.

We heartily approve of the above suggestion as it will greatly facilitate the management of the traffic. A further proposal to open out a second road from the railway station to the tank also has our approval.

(4) It is also proposed to sink another tube to tap the same sub-artesian supply that supplies the existing boring. The site proposed is on the spot where the buildings referred to above are to be removed. The Committee also wish strongly to support this suggestion. The existing boring is a great success and is a cheap method of enhancing the drinking supply of the town. A second situated near the Mahamakham tank will be a very great advantage.

(5) It has been suggested to us by the late Chairman, Mr. Krishnaswami Aiyenger, that in order to further remove the difficulties which the railway have to overcome in handling such large crowds as visit Kumbakonam during the time of the festival, it is desirable to construct two special arrival stations, one near the level crossing about a mile distance from the main station on the Madras side of the town and another close to the bridge over the Arsalar. The idea is that these stations should be arrival stations only and should be used only for pilgrim specials: the main station being reserved for ordinary traffic and as a general departure station. The District Traffic Superintendent of the South Indian Railway, who was present when the suggestion was made, considers that it is a sound one and there would be no serious difficulties in the way of carrying it out. The Committee wish to support this suggestion.

(6) In the festival of 1909 temporary sheds for the accommodation of pilgrims were used for the first time. They were extremely popular and well filled. Their number, we think, might be increased on the next occasion.

CHIDAMBARAM.

Population, 1901	Males	9,631
	Females	10,278
,, 1911	Males	10,279
	Females	11,048

Birth rate per thousand of population—
Average of last five years .. .. .. 30·13

Death rate per thousand of population—
Average of last five years .. .. .. 36·84

There are two principal festivals one occurring in June and one in December. They are annual events, the latter being the more important and said to attract on an average 60 to 70,000 pilgrims : about half that number attend the June festival.

Chidambaram is a small Municipality : the town is built round the temple which is partly Sivaite and partly Vishnuvaite. The Sivaite portion has lately been greatly improved owing to the beneficence of Mr. Ramaswami Chettiar the Municipal Chairman. This gentleman is a member of the Nattukottai Chetty community who have done so much in the south of India for the improvements of its temples and the maintenance of charitable institutions. Chidambaram has been specially favoured by his liberality. In addition to the repairs made in the temple he has given a large sum in aid of the water supply scheme and he also maintains, chiefly for Brahmins, a palatial choultry.

Water supply.—This is a very excellent scheme recently installed. The water works were completed and opened on 23rd February 1915 and cost about 4 lakhs Several of the tanks will now gradually cease to be used. The new supply with the help of some of the temple wells will, it is believed, now be adequate for all purposes both for the ordinary needs of the town and during the festivals.

Health of the town.—With the advent of the water supply this will, the Committee expect, much improve. Cholera has in the past been a frequent visitor. The Committee were not furnished with very full figures but understand that the following deaths occurred during the last seven years—

——	Whole year.	June.	December.
1908	83	3	..
1909	7	..	2
1910	72	..	..
1911	69	10	4
1912	80	..	..
1913	*Nil.*	..	..
1914	55	..	..

The festival periods do not seem from these figures to be specially dangerous and here as elsewhere the Committee are inclined to ascribe the prevalence of the disease chiefly to bad water supply and to ordinary communication with the smaller insanitary villages of the neighbourhood. The temple is, however, visited throughout the year by small numbers of pilgrims ; and these occasionally bring cholera into the town. Thus the first case occurring in 1914 is said to have been that of a pilgrim from Mayavaram. This was early in January but as no further attacks took place for a fortnight afterwards it is doubtful if he was a direct source of

infection. The main outbreak last year began on the 25th January and ended on the 5th March, and was responsible for 84 attacks and 47 deaths. It will be noted that this outbreak occurred some little time after the December festival but seems to have been too long afterwards to admit of any definite conclusion that it could be attributed to it.

Hospital accommodation.—There are no cholera sheds attached to the hospital : but a permanent structure has been erected outside the Municipal limits on the other side of the railway line. This is most inconveniently situated and is far too distant to be adequately supervised. The Committee were not surprised to learn that it has only twice been used (on each occasion for a single patient) since it was built in 1913.

Housing accommodation.—Apart from the Nattukottai Chetty choultry the charitable institutions of Chidambaram appear on the whole to be mostly indifferently maintained. One such place known as Thundavu Chetty's chatram has been converted into what is practically a lodging-house in the ordinarily accepted meaning of the term *i.e.* a house where temporary accommodation is given for direct or indirect consideration. This place though paying the special scavenging fee of Rs. 1-8-0 per quarter (the ordinary rate in the town is nine annas) has no pucca latrine. Most of the matams, of which there are about 50, show signs of neglect and do not appear to be properly kept up by their owners or carefully supervised by the Municipality. A building known as B. Narayana Pillai's choultry said to be under the trusteeship of the Pandara Sanithi of Tirupandala is ostensibly divided into a Brahmin and non-Brahmin portion. In the Brahmin portion which was in a ruined state, two students were living : the other portion has been permanently rented out. The majority of the buildings seemed to be under little effective control.

CONJEEVARAM.

Population, 1901 ..	Males	.. ..	22,533
	Females	.. ..	23,631
,, 1911 ..	Males	.. ..	26,451
	Females	.. ..	27,413

Birth rate per thousand of population—

Average of last five years .. .. 40·8.

Death rate per thousand of population—

Average of last five years .. .. .. 34·55.

There are two temples, one in Greater Conjeevaram andone in Little Conjeevaram. The former is a Savaite shrine, the latter a Vishnuvaite. Both temples celebrate a large annual festival which occurs within a short interval of each other in May and June : that of Sri Davarajaswamiar being the grander of the two. At this festival some 60 or 70 thousand persons congregate. Conjeevaram is also visited throughout the year by pilgrims, the average monthly number being said to approach 2,000.

Water supply and health of the town.—A good piped supply drawn from an infiltration gallery formed in the bed of the river Vigavathy was installed about 1896 and for a number of years thereafter cholera, which formerly was very frequently present, became much less marked. During 1912 and 1914, however, there were two rather serious outbreaks, the former being responsible for 109 outbreaks and 67 deaths, the latter for 229 and 144. It seems not improbable that the recurrence of the disease is due at any rate in part to the fact that the piped water is now no longer sufficient for the growing needs of the town : the supply is intermittent, there are a large number of house connections (about 500 we are told) and there is obviously much waste. The result is that many persons still have recourse to temple tanks not only for their ablutions but also for their drinking water. These tanks are obviously very unwholesome sources, yet it is difficult to know what to do with them. They are considered very sacred and are mostly too large to allow of being regularly pumped out or cleaned : they have as a rule very weak springs : some have none at all and merely collect the surface water of the surrounding area. Possibly the best remedy is to restore the old Lala Kalwa system through which water used to be periodically let into the tanks. The Sarva Tirtham the best of the tanks is still fed from this source. We understand that the possibility of such restoration is under investigation as is also the improvement of the piped supply.

We consider that when a private or temple tank gets into such a state that the use of its water for drinking or even for any other purpose becomes a real public danger, the Municipality should have powers to permanently close it. We are aware that interference with temple tanks is a very delicate matter and suggest that there might be some opposition to the vesting in Municipalities the power of complete prohibition. We do not of course suggest that the governing body should lightly or without very full notice put such powers into force but in cases when the owners of a tank cannot or will not make the water reasonably wholesome, it should be possible in the last resort to absolutely prevent its use. We suspect that the Mangala Tirtham at Conjeevaram which is covered with green scum and which it is probably difficult or impossible to improve, is an instance when no other treatment than complete closure is really possible.

We examined the cholera returns for 1912 and 1914 with some care with the object of ascertaining, if possible, whence the disease is supposed to come into the town. There is much communication between Conjeevaram and Tirupati also with Tirutani (near Arkonam). Residents not infrequently go to these places and pilgrims come *viâ* them to Conjeevaram. There is thus obviously danger of infection by such intercommunication—a recent case in which a man coming from Tirupati was found lying ill with cholera on the road side specially attracted our notice. In this case the man died and fortunately the disease did not spread. Such cases are probably not uncommon, but it is not necessarily only pilgrims who bring in the disease. On the contrary it generally appears to start in some

relatively small and probably insanitary village such as Okkal Parandur or Wallajabad, and is communicated by the ordinary comings and goings between these places and Conjeevaram. It does not seem usually to commence or even to extend during the time of the great festivals : no doubt because special precautions are then taken. The conclusion seems to be that however carefully the town is safeguarded at such times cholera will always be a standing menace till village sanitation is brought more nearly up to the standard prevailing in the towns. All the more reason, it may be said, for bringing town sanitation and water supply to as high a state of perfection as possible and of paying unremitting attention to conservancy permanently throughout the year and not only at the time of festivals.

Food-supply.—We were surprised to learn that here as in Tiruvannamalai coffee hotels are not licensed : this should we think certainly be remedied.

Housing accommodation.—Provision in this respect for the pilgrims did not appear to us to be as good in Conjeevaram as in some other places we have seen. The choultries are not so fine and there are fewer of the caste matams than in the more southern districts. The Pachiappa charities maintain a chatram and a good building owned by Ganga Bai, the step mother of Lodd Govindas of Madras, was shown to us as a place in which about 1,000 pilgrims are fed at the time of festivals but are not allowed to sleep. The older chatrams seem to be generally decayed and poverty stricken : the Manewari chatram maintained partly for Brahmins and partly for Byragees being a case in point. Whether this is due to mismanagement or lack of funds it would be difficult to say, but opinions were freely expressed that more control over such places would be desirable as they tend to gradually fall into private hands. In Little Conjeevaram especially there appear to be a number of semi-lodging-houses to which pilgrims are admitted for some consideration which generally includes a sort of fee for being conducted round the temples and for assistance in ceremonies. Many of the visitors especially of the poorer classes obviously, however, find a difficulty in finding house room and sleep in mantapams or on pials. It is perhaps doubtful if it would be wise for the Municipality to attempt to provide them with sheds—temporary ones for the festival may not prove very satisfactory and permanent structures would be very expensive. An experiment, however, might possibly, we think, be worth a trial.

Hospital accommodation.—This is, we think, satisfactory. The Municipal hospital has been of late years much improved and the cholera sheds in the compound are some of the best we have seen. We note, however, that only 13 cholera in-patients were admitted throughout the whole of the 1914 epidemic. The special sheds said to be put up during the festival in various places have never, we believe, been used at all. The cholera records appear on the whole to be well and carefully kept but here as elsewhere we are not satisfied that sufficient pains are taken to intelligently study the history of the various outbreaks : the particulars of the first few cases should be more carefully ascertained.

TIRUVANAMALAI.

Population, 1901 ..	Males	.. ..	8,416
	Females	.. ..	8,653
" 1911 ..	Males	.. ..	10,621
	Females	.. ..	10,623

Birth rate per thousand of population—

Average of last five years .. .. .. 36·7

Death rate per thousand of population—

Average of last five years .. .. .. 33·98

Tiruvanamalai owes its importance to its great Kartigai festival occurring at the end of November and beginning of December each year which is attended by about 1,00,000 people of whom about 40,000 come by rail. A cattle fair is also held at the same time. During the remainder of the year it appears to be a quiet and rather sleepy place and the municipal office does not seem to escape the general lethargy. At any rate, the committee found very considerable difficulty in ascertaining facts and figures bearing on their enquiry.

Health of the town.—The annual festival is held before the end of the north-east monsoon and rain is by no means uncommon during its course. Particular attention should therefore be paid to the cholera figures as here, if anywhere, it might be expected, that some connection between the festival and the outbreak of cholera could be traced. Unfortunately the Committee were not supplied with a complete statement of attacks and deaths during the whole year for a series of years. The figures given to us only show deaths and are as follows :—

Year.	Whole year.	Festival.
1908	78	1
1909	7	*Nil.*
1910	*Nil.*	*Nil.*
1911	64	52
1912	72	22
1913	16	5
1914	59	20

These figures are of doubtful accuracy but as far as they go would seem to show that cholera though not infrequently present in the town at other times of the year is particularly bad at the festival period. The Committee were, as in other places, unable to get any very accurate information as to whether it usually begins during the festival, and, if so, whether it is imported from outside or originates locally. They discovered, however, that in 1911 an outbreak, which was the worst of recent years, began on the 9th of December and continued to the 18th of February 1912, and was altogether responsible during that period for 174 attacks and 85 deaths. In this case at any rate, the festival would seem to have had probably a direct influence on the disease. The Committee examined carefully the returns of the last festival in 1914. This festival began on the 20th of November. The first attack of the outbreak was not that of a stranger but was of a permanent resident who is said to have become ill on the 14th instant and who died on the 19th. There appear to have been 15 other attacks from the 19th November to the 1st of December on which date the important part of the festival ended, and of these 6 were of persons not ordinarily resident in the town. It is asserted by the Sanitary Assistant to the District Medical and Sanitary Officer who was present during the festival, that these 6 persons did not contract the disease locally but brought it

with them into the town. The Committee, however, doubt as to whether any real investigation was made into the matter and are not inclined to accept this statement. The conclusion which we are inclined to draw is that the disease is generally in existence in the town about the time of the festival and that though some cases may be imported from outside it is more likely that the town infects the pilgrims than that the pilgrims infect the town. In either case it is of course of extreme importance that both the permanent and also the special temporary sanitation of the place should receive careful attention.

Provision for treatment of cholera patients.—In addition to the cholera shed attached to the hospital (to which 7 cases were admitted during the last festival) three temporary sheds were erected in different localities. It has been pointed out by the Sanitary Assistant to the District Medical and Sanitary Officer, that these sheds were situated too far away to render sufficient attention possible even though special sub-assistant surgeons were brought in to assist the ordinary staff. There is a piece of vacant ground north-west of the hospital compound on which it is suggested that a permanent or semi-permanent isolation ward containing accommodation for perhaps a dozen patients should be constructed. The Committee think that there is much to be said in favour of this suggestion. The present cholera shed in the hospital compound is a miserable little building with a tatty roof. It would we think probably be better to have one permanent, central and properly managed cholera shed than to go to the expense of putting up temporary sheds at different localities at the commencement of each festival.

Sanitary arrangements during the festival.—In addition to the permanent staff maintained in the Municipality, 3 sub-assistant surgeons, 5 sanitary inspectors, (one for each ward) and 3 special sanitary inspectors, one for the railway, one for the cattle fair and one for cholera duty, were employed. The permanent staff of 66 sweepers and scavengers was increased to over 230. Two maistries were employed for the cattle fair as well as 50 menials for picking up dung. Twelve stretcher bearers were also appointed. The number of rubbish and nightsoil carts was considerably increased and 50 temporary latrines were erected in various places. The arrangements as far as the Committee can judge seem to be suitable and sufficient.

Water supply.—The water supply of Tiruvanamalai is derived from tanks and wells. What is known as the Kalyani well north-west of the temple is a fine deep structure, the water of which appears to be good. The water in the wells of private houses is generally, however, said to be brackish and the people largely resort to tanks for the water. Of these, two are situated in the temple itself; that known as Brahma Tirtham in the interior courtyard, being considered to contain better water and being consequently more largely used than that called Siva Ganga which is situated in the outer courtyard. The Brahma Tirtham is not large and much of its supply seems to be derived from the surface drainage of the surrounding area. The Committee are informed that Mr. Rama Swami Chettiar of Chidambaram has some thought of extending his beneficence to Tiruvanamalai and of supplying money for bringing a regular supply of water to the Brahma Tirtham from the neighbouring hill. The Committee have no information as to whether such a scheme is likely to be feasible or is one which could be recommended by the sanitary authorities, but they consider that the Brahma Tirtham in the present condition is extremely liable to infection and should be looked upon with suspicion. The committee also inspected other tanks. Those going by the names of Ellapillai and Poomantha (the second, especially) do not appear to be altogether undesirable sources and are protected by watchmen. In unfavourable years, however, they become dry or nearly so, at certain periods of the year and they are both at an inconvenient distance from the town. There is one other tank called Chakkra Tirtham which is near the temple: this when inspected by the Committee was thickly overgrown with weeds. It is asserted that it is never used for drinking or even for bathing but at the time of inspection a woman was noticed washing clothes in it. The use of this tank for any purpose whatever should, we consider, be prohibited. It will be seen from the above remarks that the water supply of Tiruvanamalai leaves much to be desired. The Committee understand that there is some idea of introducing a pipe supply drawn from a source some 3 or 4 miles away from the town. The scheme is understood to be in a very early stage of investigation and the Committee can make no further remarks upon it. Considering, however, the great importance of Tiruvanamalai as a pilgrimage centre and the

special danger of cholera the Committee trust that the matter will receive as early attention as possible.

Accommodation for pilgrims.—Pilgrims find accommodation in a number of chatrams and matams. Some of the bigger chatrams are amongst the best we have seen. That known as the M. K. Chatram maintained by the Nattukottai Chetties is a truly palatial edifice, richly endowed and well kept. The smaller caste matams are in many cases very dark, dirty and ill-ventilated. The majority of these appear to have no fixed endowments. Some of them are practically converted into private houses being let out for rent during the major portion of the year, and only used by the manager for himself and possibly by some other members of his caste during the time of the festival. The bigger chatrams pay a private scavenging fee of Rs. 2-8-0 per quarter. The usual rate of fee in the town for private houses is only two annas per month. Many of the smaller matams do not even pay this sum and appear to be altogether unconserved. Practically every house in the town is, it is understood, converted into a temporary unregistered lodging-house during the festival. The pilgrims who cannot find house or matam accommodation sleep chiefly in the mantapams in the outer courtyards of the temple or on any convenient pial. Considering the inclement season of the year in which the festival is held, the Committee think that there is a real necessity for the provision of some temporary accommodation for the pilgrims. There appears to be plenty of space for the erection of sheds in the open ground surrounding the temple. We are aware that the Municipality is a poor body and that such special fees as it derives from charges for admission to the cattle fair are barely sufficient for the general expenses of the festival, but we cannot feel thinking that some money should be found for some such provision as we have mentioned. It would certainly greatly promote the health and well being of the crowds attending the festival.

Food-supply.—Here as elsewhere food, other than that gratuitously supplied in the chatrams, is generally obtained in eating houses and coffee hotels. This is the only Municipality which we have yet visited in which coffee houses are not licensed and most of such places we have examined are extremely dirty and we think constitute a great danger to health of the public.

Railway accommodation.—There is a special shed with booking offices attached for the festival traffic. This is only in use during the festival and it appears to us on the whole to be probably sufficient for the purpose though there was some assertion that it is inadequate. There is only one stand post with two taps on the platform but we are informed that the railway employ special water carriers for the crowds waiting on festival days. Immediately opposite the waiting shed is a shallow tank which is said to be full of water in November and from which pilgrims undoubtedly drink. This tank is polluted by the washings of a neighbouring Paracherry and we strongly advise that the Railway authorities should fill it up with cinders or other materials.

We received complaints that the trains during the festival, especially the departure trains, are badly overcrowded. We have dealt with this matter at some length in the first portion of this report : here it is sufficient to express a hope that more special trains will be run on the heavy days of the festival on future occasions. We were rather surprised to get an emphatic assertion that goods-wagons were employed during the last festival for conveying pilgrims. Neither the District Traffic Superintendent nor the present station master were at Tiruvannamalai at the last festival and it was rather difficult to make sure how far the complaint was true. The booking clerk stated that he had seen pilgrims arriving but not departing in goods-wagons. It seems possible that passengers on festival days are occasionally allowed to travel in such wagons when attached to ordinary trains. The wagons are not used for special trains. We should be glad to learn that their use is altogether prohibited.

VELANGANI.

Population, 1901 ..	Males		1,239
	Females		1,505
" 1911 ..	Males		1,343
	Females		1,656

Birth rate per thousand of population—

Average of last five years 26

Death rate per thousand of population—

Average of last five years 35

Velangani generally known as the 'Lourdes' of the South of India is famed for its Roman Catholic Church dedicated to "Our Lady of Health" and for its yearly festival—the Arokiamattia occurring towards the end of August and beginning of September, which attracts from 50,000 to 70,000 pilgrims. The Committee had the advantage of seeing the place at the beginning of the festival. The church is situated on the sea coast, seven miles to the south of Negapatam. During non-festival periods the population of the village is made up of a few toddy drawers and fishermen who live in houses scattered along the sea shore. The festival is visited by a large number of the poorer Roman Catholics and by Native Christians. Besides these—the more respectable visitors—there are a very large number of people who are frankly nothing more or less than professional beggars: many of them are maimed, some are lepers and they certainly are a most undesirable company.

The festival at Velangani has frequently been reported to be one of the main causes of cholera outbreaks in Negapatam. A careful investigation into the figures does not altogether seem to support this contention. It is admitted that on several occasions (particularly in 1910 and 1911) cholera actually occurred amongst the visitors. This being so it is an easy hypothesis that cholera infection is conveyed into Negapatam by this means, but our examination of the figures in Negapatam itself shows that cholera is always present in the town, more or less; and there does not appear to be any necessary correlation between either the Velangani or the Nagore festivals and the amount of the disease in Negapatam. The Committee saw a good deal of the town of Negapatam and we are strongly of opinion that its sanitary deficiencies are sufficient to explain the cholera death rate even without the additional factor in the two festivals. All that we think can be said is that they may and possibly do increase the danger of a recrudescence of the disease.

Accommodation for the pilgrims.—The pilgrims usually alight at Negapatam station and walk or drive to the church. A fair number of the more respectable stay only two or three days but others look upon this as an annual holiday and remain the full ten days. The accommodation that is provided is of a very primitive kind: for the better class people there are a few palmyra shelters or small mat bungalows which can be obtained by paying a rent. These are mostly occupied by Eurasian families who take a portion or the whole house for their own use. Besides these there are two rows of houses built of bricks (one completed and one in the course of construction) closely resembling the servants' quarters' in a bungalow: they are very dark, practically devoid of ventilation and usually seriously overcrowded. For the lower class and the beggars the Taluq Board construct palmyra leaf sheds which are simply temporary shelters and there are two buildings of a pucca nature consisting of a masonry floor and tiled roof which were originally, it is understood, constructed by the church assisted by a contribution from the Taluq Board. There are three choultries, that built by Jagannatha Pillai a contractor of Negapatam is perhaps the best, and finally a large number of pilgrims live in the open in a cocoanut garden situated at the back of the church. The Committee were not favourably impressed with the general arrangement of the accommodation provided for pilgrims. There does not seem to be any proper apportioning of the available land

for the different classes of pilgrims and we think it would be better if the land close to the beach and the garden behind the church could be reserved more exclusively for small bungalows or shelters for respectable Eurasian families, the open pucca sheds and additional grass sheds being kept entirely for the beggar class. There should be much better supervision of the cleanliness of these sheds and their surroundings.

Water supply.—The water supply for the festival is derived from shallow wells. As far as we can gather it appeared to be reasonably adequate, but here again, there was considerable evidence of lack of proper arrangements. Due to the report made by the Sanitary Commissioner, Madras, pumps and tanks were installed at two of the best wells so as to have at least two sources of supply which were not likely to be contaminated. Both pumps we found were in such a state as to be useless, indeed one had been removed entirely. Whilst admitting that pumps do not remain long in a good state of repair on public wells they should, at any rate, have been put right immediately before the festival. We consider that in future these pumps should be put into thorough working order and maintained efficiently throughout the festival and that it would probably be better to entirely remove them when the festival is over.

Conservancy arrangements.—The conservancy arrangements consist of making the ordinary palm leaf latrines and providing sweepers to keep them clean. We consider on the whole that the number of latrines was fairly adequate but there was a good deal of evidence that the sweeper establishment was not properly supervised. Admitting the fact that beggars and pilgrims are particularly careless in the way in which they foul an encampment, better arrangements should have been made for the rapid removal of nightsoil round the camp.

General.—The Committee were not able to spend more than an hour or two at Velangani and the festival was not in full swing. We saw enough, however, to make us think that very much better supervision of the arrangements generally is necessary, and also that a better system of laying out the ground would add to everybody's comfort. There is no reason why, with ordinary care, the festival at Velangani should not be thoroughly satisfactory ; there is plenty of room near the sea-beach for accommodating everybody. The people who are likely to give trouble and want careful supervision are the beggars. As long as the present indifferent arrangements exist we consider that it is not unlikely that Velangani may be a focus for spreading disease of all kinds, not only cholera, into the neighbouring districts.

The Committee also made enquiries as to railway arrangements at Negapatam for the festival : we found that there was a general consensus of opinion that these were fairly satisfactory, but it was suggested to us by many influential residents of the town including the parish priest and Dr. Foston who has lived in Negapatam for about 15 years, that a flag station if opened at Andanapet during the festival would be of great benefit, the argument being that the pilgrims and the beggars who follow them would then not come into Negapatam town at all but would proceed to Velangani and return by a shorter route. We are aware that the Railway Company is usually averse to such stations and it is, we think, not altogether certain that the pilgrims would thereby be altogether diverted from the town. We think, however, that the matter might possibly with advantage be further examined.

NAGORE.

Population, 1911 ..	Males	5,561
	Females	8,223

Nagore forms part of the Negapatam Municipality and separate figures for the 1901 census were not supplied to us.

Nagore, a small town situated about 3 miles north of Negapatam is noted for its Kandury festival—a Muhammadan feast which is held in the month of Jamathul-ahar about once in every eleven months of the Christian year. It lasts for 13 days; though naturally the great majority of persons who attend are Muhammadans, it is also patronised by persons of other creeds. We have seen in other places that Muhammadans visit Hindu temples, here we find Hindus present at Muhammadan ceremonies. The principal choultry in the place is maintained by a Pillai of Madras and we are even told that a Brahmin has through court sale purchased one of the 640 shares in the profits of the Durga. The approximate attendance at the festival is said to be some 12,000 or 13,000; many of the pilgrims come from the neighbourhood, but some from long distances. The principal days of the feast are the 1st when the flag is hoisted, the 10th when the tomb of the saint, Meera Sahib, round which the Durga is built, is anointed and the 12th when someone, presumably considered to be one of his descendants, sits as a "Pir" to represent him. The Durga itself is a fine edifice, richly endowed by the former Rajah of Tanjore. The town as a whole however is dingy and squalid, with mean and narrow streets and poor buildings.

Accommodation.—The pilgrims do not appear to make a long stay in the place and the majority camp in the colonnades of the Durga, pandals being sometimes also erected in front of them in the courtyards. There is not a great deal of outside accommodation. What there is, is mostly provided by the houses of the so-called Sahibmars, persons connected with the Durga, who take in and entertain pilgrims. There are said to be about 200 such houses. They are, we suspect, often overcrowded (in one which we inspected as many as 30 women and 40 men were, we were told, allowed to sleep). In some cases food is provided, in others lodgers provide their own meals or more frequently get them in the hotels or eating houses of which there are about a dozen. These are under the existing law not subject to license.

We have mentioned the choultry of Mr. Palniandi Pillai, a silk merchant of Madras. This is near the station, was finished in 1911 and is endowed with the income of two buildings in Madras said to yield an income of Rs. 3,000 a year: there is said to be a trust deed nominating the gentleman's sons as managers after his decease. The building is satisfactory and contains separate accommodation for Muhammadans, Brahmins and others.

On the Negapatam road there are three other choultries, two of which are Muhammadan and one Hindu. The Hindu building known as Pooneswamy Chetty's choultry has been sold to another family and seems likely rapidly to become a mere private house: the Muhammadan places are used as rest houses by the better classes of the community.

Requests were made to us that accommodation of a public nature should be provided, especially near the railway station and we think there is scope for some such undertaking.

Conservancy.—The town is but poorly provided with public latrines and one of these which we inspected in Durga East street is out of repair and not used. Places were shown to us where temporary latrines are placed at the time of festival. We doubt if either the permanent or temporary accommodation is anything like sufficient and we suspect that the street at the back of the Durga gets into an abominable state during the festival. We are in favour of more latrines in spots to be very carefully selected.

Water supply.—The town is connected with the Negapatam water supply which was introduced in October 1914 and is still not complete. The estimated cost is over 8 lakhs. The chief request of the Nagore inhabitants was provision of more stand posts and taps in the square before the Durga. At present we believe

there is only one stand post and as this is the place where the crowd collects the necessity for more would certainly seem to be indicated.

Cholera.—The Nagore festival is generally considered to be a fruitful source of cholera and in one year (so long ago as 1903) we have definite figures from the Civil Surgeon of the time showing that the outbreak was in the beginning confined to the pilgrims and that it was not till 23 cases has occurred, that the disease showed itself definitely among the residents. Such figures as have been put before us for recent years, however, do not show that there is necessarily much, if any, connection between the festivals and cholera epidemics. The information supplied to us was very imperfect and especially in the case of attacks obviously frequently inaccurate, but we notice that in some of the worst years, 1910 for instance, where there were altogether 581 attacks in Negapatam including Nagore the town was heavily infected months before the festival took place. The following year 1911, the outbreak, it is true, began in June just after the festival and was responsible in that month for 56 deaths in Nagore with only 13 in Negapatam. In the 1913-14 outbreak there was cholera in the main town from September 1913, possibly due to the Velagani festival but none in Nagore till January 1914 when it became very bad, there being 77 deaths against only 86 reported attacks in February in Nagore alone. During the festival of 1914 there was no cholera in Nagore though it was prevalent in Negapatam.

Negapatam is an almost inconceivably dirty and congested place: Nagore though smaller is little better. It appears to the Committee that there is little need to wonder that cholera is seldom long absent and is often exceedingly virulent. Festivals may add to the danger but quite apart from them, Negapatam is obviously a positive hot-bed of cholera. The water supply will, it is hoped, give some relief but the crying want is drainage and we would urge that a sewerage scheme should be carried out at the earliest possible moment.

Hospital accommodation.—The hospital in Negapatam is quite one of the best we have seen and is being rapidly improved and extended. Excellent cholera and small-pox sheds are under construction and will, we hope, be more largely used than the temporary ones whose place they are taking. Nagore has only a dispensary and no permanent cholera shed: the temporary sheds put up during the festival are never used and as we have seen that cholera but rarely breaks out during the festival itself and at any rate is much worse at other periods of the year, we are disposed to suggest that a permanent shed should be erected. We are told of course that it would not be of much use but think a trial should be made.

Railway Accommodation.—Nagore is connected by a branch line with Negapatam and there is said to be no inconvenience in accommodating festival traffic which after all is moderate in extent. We are told, however, that there are not sufficient carriages for females only and this is a point we think the Railway might investigate.

What is to us a novel suggestion, *viz.*, that separate booking offices might be arranged for females, was also made. Possibly so enterprising a line as the South Indian would be prepared to give this a trial and if so might perhaps select Nagore and Negapatam for the experiment.

UDIPI.

Population 1901	..	Males	4,103
		Females	3,938
" 1911	..	Males	5,560
		Females	5,311

Birth rate per thousand of population—
Average of last five years 26

Death rate per thousand of population—
Average of last five years 20

Udipi is situated in the South Canara District 37 miles north of Mangalore, which is the nearest railway station. It is famous as the place where Madhavachari founded, in the thirteenth century, a temple to Sri Krishna. Madhavachari was a reformer of the Vaishnavite sect of Hindu philosophy and the Krishna temple is therefore held specially sacred by the Madhava Brahmins. Udipi is somewhat difficult of access and the number of pilgrims who visit it is relatively small. Those who come from a distance are chiefly from the Bombay Presidency and the Mysore State; the annual car festival, held for seven days in January, which also commemorates Madhavachari's birthday, being the great occasion. This festival is called the Makarasankramana. Every second year it becomes of particular importance and is then called Paryaya. The meaning of this is that Madhavachari selected eight disciples, and these, and their successors became the Swamis of the eight principal Maths. They hold office as the chief functionaries of the temple, in rotation for two years at a time and "the change" of office takes place at the festival. The total number of persons attending the Paryaya has of late years averaged about 60,000, in intervening years the festival only draws some 5,000 or 6,000 chiefly from the neighbourhood. Udipi is also visited throughout the year by Brahmins who come in small numbers 20 or 30 at a time.

The Paryaswami during his term of office is responsible for all the expenses of the temple and for the feeding of pilgrims and local Brahmins. The Maths are semi-monastic institutions, owning large landed property and extending hospitality to strangers. There are other Maths, besides the eight principal ones, presided over by the Swamis and in these and also in private houses, the pilgrims find accommodation. The private houses are not lodging-houses in the strict sense of the word, but visitors during festivals generally pay some form of rent which includes assistance in ceremonies.

This is not the place to expatiate on the beauties of Udipi or to describe the quaint old-world dreamy characteristics of the town. The Committee found much to admire in the curious buildings but feel constrained to remark on their darkness and lack of ventilation. In the feeding hall especially, attached to the temple, it was impossible to see anything even at 10 A.M. A more modern building on the other side of the road is, however, now being erected to take its place.

Health and Sanitation.—Cholera is not common in Udipi and there have been only 45 recorded deaths in the last seven years, 3 of which occurred during the festival of 1908. Nor is it particularly malarious. There is a good deal of enteric fever, which is said to be worse this year than usual. There are a large number of minor complaints. Small-pox is probably the most dreaded disease. In 1914 small-pox broke out on the first day of the Paryaya festival and spread in an epidemic form throughout the neighbourhood giving 806 attacks and 141 deaths in Udipi Taluk alone.

The Taluk Board maintains a hospital and out-patients dispensary: in the hospital at the time of our visit there were over 30 in-patients while the number of out-patients at the dispensary approximates 200 daily. In addition to his heavy medical work, the medical officer, who has no assistant except compounders and ward attendants, has to supervise the sanitation in the town. A staff of eight sweepers and five scavengers is employed who, in addition to cleansing the four public latrines, attend also to 160 private latrines the owners of which pay a small monthly fee varying from two to eight annas. Two extra latrines are erected temporarily

during the festival and 13 more scavengers are then employed, the medical officer getting some help from the Malpe Port Health Officer who is then called in to assist.

We give these details at some length because we wish to make it clear that in our judgment much more attention should be paid to sanitation and the public health. There are said to be about 2,000 houses in the town and even when no festival is going on it is obvious that there is little or no conservancy. During the festival we are not surprised to learn that the place becomes very unclean and we received specific complaints to this effect. The medical officer is much over-worked and we think that not only should he be entirely relieved of sanitary work but that he clearly ought to be given the assistance of a sub-assistant surgeon.

Udipi is not a Municipality and Union administration is unknown in South Canara. We made particular enquiries from the leading persons of the place to find out their attitude as to the possible introduction of some form of local self-government. The Vakeels and a prominent Muhammadan merchant expressed opinions in favour of a Municipality which would presumably include the port of Malpe 3 miles distant. The managers of the Maths and the petty traders appear to be much against the idea, the former, no doubt, because they feel it would interfere with the prestige of the Swamis, the latter from fear of taxes and oppression. Clearly the sanctity of the temple quarter would be a difficulty and especially in the matter of conservancy and the Committee do not wish to express any decided opinion upon the best course to pursue. We must, however, most strongly insist that a better staff is absolutely essential. If the Swamis do not want the temple surroundings to be cleansed by a public body, the alternative would seem to be that they should, under the general superintendence of the District Medical and Sanitary Officer, undertake the task themselves, especially during festivals. This they would probably be willing to do. The minimum requirements for the rest of the town are a sanitary inspector (with a larger staff of scavengers) and a sub-assistant surgeon.

Water supply.—The water supply is derived from wells : it is believed to be fairly good and except just before the monsoon is not inadequate. We hear that some investigations have been made for a more ambitious scheme but understand they have not so far been very promising. The extension of the well system is probably all that can be expected for the present.

Plague Regulations.—We have dealt elsewhere with the general question of the utility of Plague Regulations as applied to festivals. Here it is sufficient to note that attendance of pilgrims from plague infected areas has been prohibited at all the Udipi festivals since 1902. In order to make the restriction more effective the period of prohibition extends to some days both before and after the actual days of the feast : we learn, however, that even this is not enough and that, rather than miss what to them is so important an event, pilgrims from infected places make a point of arriving just before the period of prohibition commences. It thus appears to us that the regulations tend to defeat their own object—*i.e.*, instead of preventing the attendance of suspected persons they cause such attendance to be more prolonged and hence presumably more dangerous. We think that in future the prohibition should be withdrawn.

3DGIMS

TIRUPORUR.

Population, 1901	Males	.. ..	1,313
	Females	.. ..	1,383
,, 1911	Males	.. ..	1,424
	Females	.. ..	1,501

Birth rate per thousand of population—
Average of last five years 27

Death rate per thousand of population—
Average of last five years 19

Small festivals take place during Kirthiki of each month. Brahma Utchavam occurs in February of each year and lasts for twelve days. The monthly festivals are said to be attended by about 2,000 pilgrims on an average; as many as 7,500 gather on the big day of the Brahma Utchavam.

Tiruporur is a small Union, situated about 20 miles from Madras near Covelong. There are only 525 houses. The village clusters round the Saivate temple and it is largely visited by people from Madras. Several good roads lead from Madras to Tiruporur and it is a sort of picnic resort for the Madras populace. The pilgrims do not stay long; they mostly arrive in the morning and leave in the evening. Occasionally, they stay a night or two in one of the various choultries. Of these there are 49 founded chiefly by Mudaliars of Madras. They are for the most part satisfactory.

Water supply.—The drinking water supply is derived from wells and from a large tank which is reasonably well preserved, a watchman being posted to prevent people bathing and washing clothes in it. The police lines are situated in its neighbourhood and they assist in the preservation of the tank. In exceptionally dry years there is, we are informed, a considerable shortage of water, the tank then dries up and so do most of the wells. The Committee recommend that after an investigation for a suitable water bearing stratum, additional wells might with advantage be provided. We do not, however, consider the matter to be extremely urgent. There is another tank close to the temple which is supposed to be used only for bathing. Silt is said to be removed from this a fortnight before the Brahma Utchavam. It would, we think, be better if this were done in the hot weather.

Conservancy arrangements.—The sanitary arrangements are those usually made in a Union and are somewhat deficient. When the place is crowded the neighbourhood is very much fouled. Under ordinary circumstances the small staff kept by the Union do fairly well. During important festival occasions an energetic sanitary inspector should be deputed to the place and the necessary staff placed at his disposal. The Taluk Board spends about Rs. 70 for the Brahma Utchavam and the temple contributes Rs. 25.

Cholera.—The place is subject to occasional cholera outbreaks; not however of a very severe nature. In 1912 cholera occurred at the time of the main festival but does not seem to have formed the subject of any special enquiry and it was impossible to ascertain the exact figures. It is by no means impossible that cholera might be imported into Madras by pilgrims returning from Tiruporur and any occurrence of the disease at the place should therefore be carefully watched.

Medical.—A new dispensary building has just been erected but has not yet been opened. A cholera shed might be added to it when funds permit.

TIRUPATI.

Population, 1901	Males	.. ..	7,544
	Females	.. ..	7,941
" 1911	Males	.. ..	8,239
	Females	.. ..	8,462

Birth rate per thousand of population—
Average of last five years 28

Death rate per thousand of population—
Average of last five years 33

It is a Municipal town.

Three festivals are held during the year—(1) the Tirumalai Brahmochavam in September, (2) the Gangajathra in May and (3) the Madwa Sabha in December. No. 1 is visited by about 35,000, No. 2 by 10,000 (mostly from neighbouring villages) and No. 3 by about 5,000 pilgrims.

Tirupati is one of most important pilgrim centres in the Madras Presidency. There are three distinct shrines to which the pilgrims resort. There is the main temple in Tirupati itself: there is another one, two or three miles away in a village called Trichanur, and the most important of all is on the hill known as Tirumalai. It will be necessary to say something about these various places.

The importance of Tirupati is very great and it closely resembles Rameswaram in many respects. Like the latter place it is visited by an enormous number of people from the north of India and here also as we noticed at Rameswaram the festivals, though no doubt of great importance, are by no means the only occasions on which pilgrims come to the place. In fact we were informed that the daily number of arrivals in Tirupati approaches 1,000. The actual festivals have somewhat decreased in importance in recent years. This is possibly to some extent due to the stringency of the plague regulations.

We have dealt with this subject at length in the first part of the report and here need only note that in our opinion the turning back of pilgrims arriving from an affected place causes the maximum of irritation and hardship and the minimum of preventive effect. On the five occasions on which plague is known to have been brought into Tirupati it was by residents importing goods. It has never been traced to a pilgrim and if they are thought to be a source of danger, we ask why the continuous stream arriving throughout the year have never been found to communicate the disease.

Cholera.—Tirupati has always been accused by other pilgrim centres as being a great disseminating centre for cholera. It is certainly a dangerous place as the following figures show:—

Year.	Attacks.	Deaths.
1908	24	24
1909	3	2
1910	15	8
1911	1	1
1912	150	81
1913	18	11
1914	216	105

In the specially bad epidemic which occurred in 1914, there were two distinct outbreaks one in May and the other in August. Apparently early cases were imported

from several places simultaneously, and the disease was spread by the contamination of the water supplies. The second epidemic continued through the festival in September. Here again we find as in other places, that the records concerning the epidemics are extremely badly kept. No information is given as to how many attacked, were pilgrims and how many local residents. Analyses made of the water at the King Institute revealed the fact that cholera vibrios were present in the Narasimha Tirtham in May and in a big well in Penta street in August. In both cases the discovery was communicated by telegraph yet nothing was done except to hankinize the water. It was perhaps impossible to prevent the use of the Tirtham but we consider it extraordinary that the well at least could not have been temporarily closed. We think that this outbreak was not at all well managed and the authorities are obviously not sufficiently alive to the serious importance of an outbreak of cholera in a festival at Tirupati. The annual returns examined at the hospital showed no cholera in-patients and 57 out-patients. The Commitee are not surprised that the epidemic was a severe one if cases were not removed from the houses in which they were attacked. We find, however, that some (approximately 20) cases were treated in the cholera shed and do not understand why they are not recorded as in-patients. The cholera shed does not appear to be very satisfactory. It is situated too far from the existing hospital and the buildings used as wards must be extremely hot as no verandahs are built. We are strongly of opinion that it is necessary, as in other places, to provide a suitable and attractive hospital close to the main hospital. We consider that the land to the north of the compound might possibly be suitably employed for this purpose.

Housing accommodation.—The pilgrims who remain in the town of Tirupati are accommodated in chatrams and in lodging-houses. The *bairagis* receive shelter and also food in the math belonging to the Mahant. The chatrams are not unlike those we have seen in other festival towns, some being extremely well built and kept up and others being less satisfactory. We received complaints that their number was insufficient. On the whole we have little to say about them except that the sanitary arrangements are for the most part very deficient. The Municipality should see that these are improved. The lodging-houses are in some ways an advance on those we have seen in other parts of the Presidency. In the present state of the law they cannot be definitely licensed but an attempt has been made to restrict the number of occupants. The number allowed is specified on the door of the house, each occupant being supposed to have 500 cubic feet of air space for himself. The arrangement is distinctly a step in the right direction, but as it depends on no legal sanction it is probably inoperative and we suspect the lodging-houses are overcrowded during festivals. Many of the houses we have visited are satisfactory; others are less so. The latrine arrangements in practically all of them are bad or entirely absent. As soon as the Municipalities Act is extended great attention should be paid to the licensing and control of these places.

Water supply.—Tirupati has had for some years a protected water supply but it has become quite insufficient for the needs of the town. At present a new pipe line is being laid and a gallery is being constructed at the source to increase the quantity of water available. The Committee can only suggest that the work be pushed on with the greatest possible speed as numerous unwholesome supplies are being used to make up the deficiency and as above noted these frequently become infected with disease. At present there is only three hours' supply available namely two hours in the morning and one hour in the evening. This is wholly inadequate under normal circumstances and particularly so during the occasions of festivals. As a result of this scarcity, wells, tanks and spring channels known as "buggas" are made use of for drinking purposes. The wells are not satisfactory nor are they protected. The buggas consist of springs which rise in some sandy ground, the water being conveyed into the town by a closed channel where it opens into a masonry tank from which people can take it. The water is supposed not to be used for drinking purposes but obviously often is. Concerning the quality of it we are unable to say anything. It is, however, inferior to the pipe supply. The epidemic of cholera in 1914 demonstrates the fact that shortage of good water was largely responsible for the death rate on that occasion.

Drainage.—The drainage of Tirupati is also a problem which requires immediate attention. Even with a very deficient water supply there is still a large amount of

surplus which is not properly carried off by the existing drains. When the water supply has been further increased, as will probably happen within the next two years, the town will be in an extremely bad state and an entire overhaul of the drainage system is absolutely necessary. At present in all the main streets there is stagnation of sullage water on account of the unsatisfactory structure of the drains. The Committee do not consider that they are in a position to state definitely whether the drainage should be underground or surface but in a small town like Tirupati probably a combination of the two systems will be most satisfactory. The Committee also consider that if the improvement of the drainage is delayed long after the increase of the water supply there is a considerable danger of the town becoming highly malarious. Considering the importance of the town as a pilgrim centre we consider that the improvement of the drainage is very urgent.

Conservancy.—Tirupati is a municipal town and has a conservancy staff consisting of two sanitary inspectors and scavengers for public and private latrines. The work is not very well done and the staff is hardly adequate. The lodging-houses and chatrams should certainly be obliged to have good private latrines which should be properly conserved. The Committee consider the sanitation of Tirupati a specially important matter and are not satisfied that the Municipal council really realize the great responsibility imposed upon them or if they have sufficient skilled supervision to look after the matter properly. The resources of the Municipality are small and assistance will no doubt be required from Government before the high standard of efficiency, which is desirable in so important a pilgrim centre, can be reached. We have discussed elsewhere the possibility of introducing a pilgrim tax : opinion in Tirupati seems to be in favour of such a measure and we think that it is eminently a place where such a tax might be expected to be profitable and are disposed to recommend its introduction.

Railway accommodation.—The need for a better waiting shed at Tirupati East was specially brought to our notice. We have dealt with this matter in the first portion of the report. There seems to us to be plenty of space available for an improved station and we cordially endorse the local feeling as to the necessity for its enlargement.

TRICHANUR.

This is a small village situated two or three miles from Tirupati and contains a large tank with a temple at one corner. The population is small but the place is of much importance to the pilgrims—and many people come here to perform marriages. The great want is a satisfactory water supply. At present there is an extremely dangerous supply which is capable of considerable improvement. We have already mentioned the springs known as " buggas " in the note on Tirupati : here these also exist. The water arising from and running over a sandy bed is frequently polluted by people using the neighbourhood for the purposes of nature, and as we have already pointed out in the case of Madura,when a water-bearing sand is once fouled this condition of affairs is particularly dangerous because cholera vibrios will live probably in wet sand much longer than they will in water. The Committee are inclined to believe that Trichanur is an even more serious menace to the health of pilgrims generally than Tirupati itself. It is impossible to demonstrate this from the returns but we think it probable that local opinion on the subject is correct in this respect. Trichanur is such a small place that it should be perfectly possible to provide a good protected filtered supply, at a comparatively small expense, from one of the springs above mentioned, but the fact that they are also used for irrigation is no doubt a difficulty. We are, however, strongly of opinion that the whole subject should be investigated by a skilled authority and a good water supply provided if possible. We would also point out that greater care should be exercised in removing the weed from the large bathing tank round which the houses congregate. A certain amount of vegetable matter is removed from month to month but the tank is never properly cleaned. This large tank is fed from another spring the banks of which are highly fouled. The only remedy locally suggested was that it should be protected by the police and also possibly fenced with barbed wire. We doubt the efficacy of such precautions and think it would be better to bring the feed water for the tank from the spring through a pipe and not trust to the open channel.

Trichanur is not even a Union and the small sanitary staff is looked after by an honorary supervisor. This gentleman works hard and enthusiastically but is the first to admit that the present arrangements are far from adequate. The proper remedy would seem to be to include Trichanur in the Municipal limits of Tirupati. Probably the only serious difficulty would be the question of the upkeep of the road between the two places. We think it should be possible for the District Board to contribute to its maintenance if handed over to the Municipality and suggest that the matter should receive consideration.

TIRUMALAI.

Tirumalai is an extremely picturesque village which clusters round the large temple on the hill seven miles from Tirupati. The population is but little over a thousand. Practically every house in the place was at one time the property of the Devasthanam but owing to neglect by the Trust the occupants have in many cases gradually been allowed to become the owners. The Devasthanam are now engaged in a scheme for improving the town and they propose to buy out some of the smaller and inferior shops to widen the streets. They also have a scheme on foot for building a large chatram, the plans of which were shown to us and of which we approve. The subject of the water supply has been receiving attention for some time back. Under a scheme originated by Rao Bahadur A. Rama Rao, the energetic Peshkar of the Devasthanam, it is proposed to restore two large tanks on the hills above the town which have been allowed to fall into disuse. A masonry bund is to be put across the ravine and the water held up from this point. The water is to be brought to the town by a pipe which divides above the town into two main supplies. The unfiltered supply is to feed the two main tanks for bathing in the town, and the other portion is to be filtered in a Jewel gravity filter and distributed to the town as a drinking supply. The plans for this were shown to us and we consider that the scheme is a good one with every prospect of success. The building of the masonry bund will be a difficult piece of work and should be entrusted to a thoroughly competent Engineer accustomed to do large works of this nature. At present the water supply is got from a smaller tank which is carefully preserved from pollution and is distributed throughout the town in pipes. The present supply is admittedly somewhat inadequate at certain times of the year, but the proposed new works should entirely remedy this deficiency.

Accommodation for the Pilgrims.—The visitors to Tirumalai do not as a rule stay there for more than two or three days and have no great difficulty in finding accommodation of a sort. Many of them camp in the 1,000-pillared Mantapam, part of which has been converted into rooms. This spoils the beauty of the structure and the whole arrangement of the village struck us as rather tumbled. The Devasthanam have however, as above noted, extensive schemes for improvement and intend to lay out a new pettah which is much to be desired. A further scheme to remove all the houses round the Pushkarini is perhaps more open to criticism. It will at any rate be very expensive, the acquisition alone is said to be not unlikely to amount to nearly Rs. 2 lakhs. The backs of the houses are towards the tank and while their removal would no doubt add to its cleanliness and improve the approaches, it seems somewhat doubtful if it is necessary to go to the great expense of entire removal and whether a properly thought-out drainage scheme would not effect the desired object at less expense. Some improvements in the drainage and an arrangement for letting out the surplus water of the tank is already in progress and is in the hands of a skilled supervisor. The Committee naturally had not time to closely look into details and can only admire the energy displayed and wish it success.

While we were at Tirumalai we inspected the arrangements that had been made by the Devasthanam for the festival which was about to take place. On the whole we consider that these were satisfactory. The District Medical and Sanitary Officer of the district has deputed an Assistant Surgeon to attend the festival. On the whole we consider that it would be difficult to find a more suitable place for

pilgrimage and that with ordinary common sense, there should be no difficulty in keeping the place free from infectious disease should it be imported into the town.

At the time of our visit the whole seven miles of road up to the temple were thronged with beggars, some of whom live in small huts near the road: others merely camp on temporary "pitches." These people are the reverse of healthy but as they do not move about much and as they live in small settlements on a lonely hill-side they probably have little or no influence on the health of pilgrims.

The three step wells on the road should be converted into ordinary draw wells or better still provided with pumps and tanks to supply the pilgrims.

KALAHASTI.

Population 1901 ..	Males		5,708
	Females		6,284
" 1911 ..	Males		6,166
	Females		6,773
Birth rate per thousand of population— Average of last five years			23·77
Death rate per thousand of population— Average of last five years			23·30

Kalahasti, a fairly big Union village, is situated on a small stream called the Swarnamuki not very far away from Tirupati. Pilgrims not infrequently proceed from Tirupati to Kalahasti, pay their visit to the temple and then proceed either to other shrines or return home. We are informed that the daily average of pilgrims visiting the shrine, other than at festival times, is probably, about three hundred. The main festival occurs in February or March and is usually attended by about 15,000 persons. The temple is picturesquely situated on the bank of the river: the village is long and straggling.

Health of the town.—Cholera figures for recent years are given below: it will be apparent that the town itself is very frequently afflicted with this disease independent of the festival. A very casual inspection is sufficient to show the cause of this.

Year.	Cholera.		Proportion in festival times.	
	Attacks.	Deaths.	Attacks.	Deaths.
1908	..	..	..	..
1909	1	1	..	..
1910	..	..	..	..
1911	17	9	..	..
1912	147	75	12	3
1913	30	16	13	7
1914	68	48	..	..

Kalahasti is one of those unfortunate places which, like many others in Southern India, derives its water supply from a small clear stream of water flowing down the wide sandy bed of the river. Practically in every case where a town is dependent on this form of water supply, cholera is a frequent visitor. Many examples can be given—Madura, Srirangam and Trichanur being amongst the number. In such a place cholera is sure to be relatively more common amongst the residents than it is amongst pilgrims, but it must not be forgotten that it is highly probable that a constant stream of infected persons leave the town for other localities, some near and some more remote.

During the festival a large number of the people camp in the river bed: in this they make small wells and we are informed that the Union also supplement the town supply by constructing ring wells about three feet deep in the sand. As previously stated in the Madura report this type of well is particularly dangerous because the sand is sure to be infected with cholera vibrios sooner or later. There are also some private and public wells in the town which supply a certain amount of drinking water. One of these wells situated in Poosala Street has been closed

in with a masonry cover ; a pump has been provided and the water is drawn by taps from a steel tank. The work cost about Rs. 2,000 but does not seem to have given much satisfaction and some of the more conservative inhabitants frankly stated that they wished it to be removed. The spill water from the well is very badly disposed of and on the whole we consider that for a Union, whose resources are necessarily very limited, the money could have been better expended on a protected water supply derived from the river. The Committee are strongly of opinion that such a supply should be constructed at a very early date. All that is required is a gallery in the bed of the river above the town and a small distribution service of hydrants. The natural features of the place are very favourable to such a supply and the cost will not be excessive.

Accommodation for pilgrims.— The pilgrims who visit the town throughout the year live mostly in one or other of the various choultries and chatrams or find shelter in the mandapams close to the temple. During the festival these places are filled up and a certain number of the pilgrims make temporary encampments in the river-bed. Many of the choultries are not well maintained and the majority are reserved for Brahmins only. The Committee are strongly of opinion that encamping in the river-bed is unsatisfactory, principally because it is impossible to prevent the visitors making use of a very doubtful water supply. We think that if temporary sheds are required they should be constructed near the temple but certainly not in the bed of the river and every endeavour should be made by the police to prevent the digging of small pits in the river-bed. The river will, of course, be used for bathing purposes and for watering cattle.

Bridge over the river.—A bridge over the river is a very urgent necessity for the town. We are informed that an estimate has already been framed and we trust that the work will be carried out as soon as funds can be found.

Conservancy arrangements.—The committee are of opinion that Kalahasti is one of the many small pilgrim centres which will always require very careful management. With a filtered and ample water supply a good deal of the danger should disappear but at festival times the conservancy staff of the Union will naturally require strengthening and it is of the utmost importance that the pilgrims should be prevented from fouling the river-bed and from making use of an unsatisfactory water supply for drinking purposes. To these points the authorities should pay particular attention at future festivals.

W. W. CLEMESHA.
H. THOMSON.
E. S. LLOYD.
M. RAMACHANDRA RAO.
H. W. McCAULLY HAYES.
A. L JACKSON.

NOTE OF DISSENT.

I have signed this report subject to a fuller expression of my views on a few points raised in this enquiry. I do so, not so much as to strike a discordant note, but to emphasise some of our conclusions in my own way. One of these relates to the obligations of the Railway Administrations to the travelling public. We have unanimously come to the conclusion that at festival times there is "very considerable overcrowding" in the trains of the South Indian Railway and that the complaint about overcrowding is certainly a genuine grievance and is by no means confined to festival occasions. My colleagues are, however, disposed to doubt whether the overcrowding is so excessive as to constitute a scandal. I do not know at what stage my colleagues would regard that "the very considerable overcrowding" occurring on the South Indian Railway would amount to a scandal. This must be a matter of individual opinion. The responsibilities of the Railway under the Indian Railways Act and also as common carriers, are defined by statute and I am not prepared to apply any other test. From what I have heard and seen during our tour, the South Indian Railway are not disposed to treat any act of overcrowding as a scandal. We have unanimously come to the conclusion that on festival occasions the Railway Company packs its trains to their utmost capacity and action to relieve the congestion is taken only when the passengers are found standing in the trains. Whether this state of things amounts to a scandal or not, it is certainly not a matter of indifference to the travelling public. Numerous complaints on the subject of overcrowding on the South Indian Railway have been made for years both in the press and on the platform and in the Legislative Council, but the Railway Administration have always tried to dispute the accuracy of these complaints. In this country the construction of railways is practically a State monopoly and the South Indian Railway is now a State line and under the agreement for the working of this line $\frac{13}{14}$ths of the net profits is appropriated by the Government. The percentage of the net earnings to total capital outlay on this line in 1913-14 is 7·12. Under these circumstances the Government can no longer take up the position that the Railway Company is solely responsible for the removal of the existing complaints. The increase of the third class passenger traffic carried on the South Indian system is quite a distinct feature and amounts to nearly 33 per cent. over the previous figures for the quinquennium ending with 1913-14. I trust, therefore, the Goverment will take steps for removing this long standing complaint in Southern India. It was stated that there have been some additions to the coaching stock in recent years and the figures furnished to me are so inconclusive that it is impossible to form any opinion as to whether the need has been fairly met.

2. It has been pointed out to us by several gentlemen throughout our tour that the pilgrim specials are run only to the nearest junction stations on either side, from where the passengers find great difficulty in finding accommodation in the connecting trains. It has been asserted that extra accommodation is not usually provided from the junction stations and that consequently the connecting trains during the festival times are so overcrowded as to make a journey during the period very uncomfortable. The railway authorities furnished me with a statement of the specials run for the various festivals, but would not answer further enquiries about the accommodation available from the junction stations. In this state of things, I must conclude that the present arrangements of running specials to the nearest junction stations, without expanding the train-accommodation from these points is causing a great deal of public inconvenience.

3. I am unable to agree with the suggestions of my colleagues in paragraph 9 of the report for the re-introduction of monthly fees and contracts for the disposal of the right to sell articles of food at railway stations. The South Indian Railway was no doubt making a handsome income from this source till very recently and the large sums paid by contractors for this monopoly were recouped by them by enhancing the price of the articles of food sold by them. After a good deal of agitation this practice, which necessarily forced up the prices of cooked food available on the railway, was given up, but it is still in vogue on the Madras and Southern Maharata Railway. The evils of the present system can be fully realised by a casual inquiry about the amount paid annually by contractors and the prices of cakes and other cooked food at junction stations like Renigunta, Katpadi, Bezwada,

Guntur and Samalkota. I must, therefore, object to any step which would enhance the price of such articles of food as are now available at the railway stations. The main reasons assigned by my colleagues is that the fees so obtained may be devoted for employing regular food inspectors. In regard to European refreshment rooms where meals and light refreshments are served, the railway companies have adopted a different policy. The caterers, on the other hand, are given various concessions. Well furnished waiting rooms without any rent, concessions of some kind for the conveyance of the caterer's goods and servants and dining cars on the mail trains, are some of the directions in which special treatment has been accorded to them. I should not be understood as objecting to these concessions. On the other hand I cordially approve of this line of action and plead that the same policy of keeping the cost of food as low as possible and of maintaining a wholesome supply of food on the railway, should be extended for promoting the convenience of the Indian passengers as well. I would also suggest that a responsible Indian Railway Officer of some standing should be appointed to orgnanise and supervise food supply on the South Indian Railway. I understand that there is such an officer on the Southern Mahratta Railway.

4. On the subject of the control of charitable institutions I would go much further than my colleagues have done. We have unanimously come to the conclusion that the Madras Regulation VII of 1817 is long out of date and the powers given by it are vague and inadequate. Enlightened Indian opinion so far it has found expression in our tour is entirely in favour of more effective control over public charities of secular nature such as choultries, rest houses, mattams and other buildings and endowments connected therewith. One of the proposals that has been made to us was that there should be in each Taluk, a mixed Board of officials and non-officials with the Central Board in Madras for the control and supervision of public charitable institutions and that the Board of Revenue as such should be divested of its functions under Regulation 7 of 1817 and that legislation should be undertaken vesting the control in a Central Board such as that above suggested. Another suggestion was that the existing machinery should be utilised for the purpose and that Taluk Boards and Municipal Councils should be entrusted with the control and supervision of all public charitable institutions within their areas and not merely of those which are transferred to them by the Board of Revenue under the Regulation of 1817. In fact a strong desire has been expressed that some machinery like the Charity Commissioners in England should be set up for the protection and control of public charities with visitorial jurisdiction and with ample powers of inspection and audit. It has also been represented that the present legal charities is too dilatory and expensive and beneficiaries are not willing to undertake the trouble and expense of litigating about the misapplication and misappropriation of charity funds. Judging from what we had heard and seen of these institutions, I concur in the soundness of the demand put forward for securing a more effective control of public charities in this Presidency. Public opinion in this Presidency, as also elsewhere in India, has been pressing for legislative action for the protection and regulation of public charitable and religious institutions. The proceedings of the conference summoned by the Government of India last year indicate a change of policy in regard to religious endowments and I strongly suggest that any legislation on the subject should also include public charities of a secular nature. In my opinion suitable provision should also be made for securing an accurate record of public charities and for the regular publication and periodical audit of the accounts of these charities. I also feel that the existing remedies against defaulting trustees are too expensive and dilatory and that in the existing state of things in this country we cannot look to the beneficiaries to take steps for the protection of public charities and that some sort of public control and inspection through the medium of Local Boards must be provided. The necessary legislation may be undertaken and I feel no hesitation in saying that public opinion in this Presidency will fully support such a step.

5. I must also refer to the necessity for placing the sanitary administration of Rameswaram and the three other subsidiary places of pilgrimage, under a capable officer to be assisted by a special health officer. We have made a recommendation to this effect, which will be found in our notes on Dhanushkodi and it is perhaps necessary to set out our reasons a little more fully. In dealing with Rameswaram it has to be borne in mind that there are three other places of pilgrimage in its

vicinity to which the pilgrims usually resort. Of these Devipatnam is a village 7 miles from Ramnad and is now administered as a union. Dharabhasayanam is another small village where we are informed that no sanitary arrangements of any kind exist, but we have been told that a voluntary sanitary association has been formed by some of the principal residents who are interested in keeping the place clean and that much success has not been attained by their efforts. Myself and my colleagues were unable to visit these two centres, but in view of their close connection with Rameswaram, I am of opinion that effective and continuous sanitary control is necessary in these two places. In the case of Dhanushkodi, attempts were made to constitute this area into a union, but on account of the small number of permanent inhabitants the idea was given up. Dhanushkodi is, however, important from the fact that all the pilgrims who come to Rameswaram go there also to take a bath at the Point and consequently the floating population at Dhanushkodi is as much as it is at Rameswaram. As regards Rameswaram itself the administration is an ordinary one of a small union with an annual income of about Rs. 4,000. We have fully referred in our notes to the importance of Rameswaram and the three connected places of pilgrimage and the present administration of Rameswaram is, in my opinion, inadequate to the needs of the locality and that better arrangements should be made, not only in the case of Rameswaram but also of the other places referred to above. Most of the house-owners at Rameswaram are either priests, pandas, or temple servants and the class of men who are available elsewhere to serve as Chairman and members of the Union is not available at Rameswaram. Under these circumstances and in view of the extreme importance of Rameswaram and of the introduction of a water-supply scheme, I would strongly recommend that a full-time officer of the grade of Tahsildar be appointed as Chairman of the Union. This officer may also be entrusted with the duty of looking after Dhanushkodi, Devipatnam and Dharabhasayanam under the general direction of the President of the Taluk Board, Ramnad. The appointment of an administrative officer and a sanitary officer for Rameswaram and the connected shrines is absolutely necessary in the peculiar circumstances of the case, and the entertainment of these officers and the additional staff for conservancy in these areas will involve at least an annual expenditure of Rs. 6,000. If our recommendations are to be carried out, the District Board will have to receive financial assistance from the Government, as I do not believe that the Board is in a position to incur this expenditure. In the concluding portion of our report we have referred in a general way to the financial aspect of our proposals and have come to the opinion that the cost of sanitary schemes for places which, while themselves impecunious, are important as being likely to effect the health of India as a whole, must continue to be financed largely, if not wholly, by the general tax-payer. I have made special mention of Rameswaram to illustrate the present position. Most of the places of pilgrimage we have visited are, apart from their religious associations, small and of little importance and comprehensive schemes of sanitation are far beyond their resources though they are nevertheless necessary. They are chiefly required for the protection of the neighbouring districts, of the provinces, and of India as a whole and the charge for initiating these schemes should be provided by grants from Local and Imperial Governments and it would be inequitable to throw any portion of the charges on the local inhabitants.

6. I should also like to call special attention to the present state of water-supply at Dhanushkodi. As will be seen from our notes about this place the surface wells do not yield enough of good and pure water to answer the needs of the very large number of pilgrims and we have come to the conclusion that, for the time being, the arrangements for bringing water by train from Pamban will have to remain. The Government departments at Dhanushkodi are now being supplied in this way by the Railway; but the pilgrims are now suffering very much for want of good water. I believe the same arrangement as has been made in the case of the Government departments might be made for the floating population of Dhanushkodi. The Honourable Mr. Muirhead, the agent of the South Indian Railway, informs me that this is quite feasible and I would, therefore, suggest that suitable arrangements may be made as early as possible.

7. We have not been able to make any enquiries about the police arrangements at the festival times. I might, however, mention that I heard several

well grounded complaints about the state of things at Rameswaram and Tirumalai. As I have already pointed out the floating population at Rameswaram is more or less steady throughout the year, the arrivals by the train being about 300,000 per annum. The pilgrims travel to Devipatnam and Dharabhasayanam by country carts. Similarly the arrivals at Tirupati come to about 400,000 per annum and are evenly distributed throughout the year. Rameswaram had a police station before the reallocation scheme was introduced, but this has now been reduced to an outpost, one head constable and four police constables being the force available at Rameswaram though on special festival occasions this is increased. There is neither a station nor an outpost at Dhanushkodi, Dharabhasayanam and Devipatnam. The Superintendent of Police, Ramnad, has informed me that a station has been proposed for Rameswaram and for Devipatnam, respectively. We have heard numerous complaints at Rameswaram that the pilgrims are in need of better protection. In regard to Tirumalai also, I was given to understand that the pilgrims who generally go there with jewellery and other valuables are also in need of efficient police protection during their temporary stay. There is an outpost with four constables at Tirumalai and very many unfavourable statements have been made about the present state of things. The outpost should, in my opinion, be converted into a station, and I would therefore suggest the requirements of both the important places of pilgrims from a police point of view should be thoroughly examined.

M. RAMA CHANDER RAO.

Dated the 2nd December 1915.

APPENDIX I.

MADRAS PILGRIM COMMITTEE.

South Indian Railway Company, Limited.

The following statements show what is done on the South Indian Railway as a regular routine procedure in dealing with infectious diseases or illness occurring among passengers in trains or on railway premises.

The infectious diseases that have to be dealt with occurring among passengers are chiefly cholera, plague and small-pox. In every case where a passenger is found to be suffering from an infectious disease in a train or on railway premises the following is the procedure. See Statement " A." From this it will be seen that every precaution is taken against the spread of infectious or contagious disease, and the rules are very strict regarding the procedure as set forth in Statement " A." As the cause of death in some cases may be doubtful as to whether the deceased died from an infectious or non-infectious disease, the precaution is taken of treating every carriage in which a death takes place as if it were infected. In all cases of infectious disease the apothecary in attendance has orders to take the ticket number and the starting station and the destination of the patient.

A specimen letter from an apothecary to the Chief Medical Officer showing procedure adopted in a case of cholera is attached for information. In all such cases a telegram is sent to the Chief Medical Officer informing him of what has occurred.

Statement A.—When it is discovered that a passenger is the subject of infectious disease steps should be immediately taken as follows :—

(1) *To notify the fact.*—The apothecary of the section should be wired to by the guard of the train, so that he may be prepared for the further dealing with the case, a copy of such wire to be sent to the Chief Medical Officer.

(2) *To isolate the patient.*—The carriage in which a passenger suffering from an infectious disease is travelling should be vacated by all healthy passengers, except such friends who wish to remain in attendance on the passenger.

(3) In case the passenger does not reserve the carriage in which he travels to the end of his journey, the carriage should be detached at the first station, where there is a suitable hospital, and the patient handed over for treatment by the local medical authorities. The Station-master should advise the police.

(4) *To disinfect the carriage, etc.*—A contaminated carriage should, immediately on being vacated, be closed, locked, labelled " To be disinfected " and shunted to the end of a lay-bye. The apothecary to proceed for disinfecting it in the following manner :—

(*a*) The carriage should first be well and freely douched with carbolic acid lotion (four ounces of No. 5. carbolic acid being added to each gallon of water).

(*b*) The carriage should then be opened and douched in every part freely with 1 in 1,000 perchloride of mercury lotion.

(*c*) The carriage should now be left open to the fullest extent and submitted to the action of light and air, and after 48 hours of such exposure, the carriage may be used again.

(5) *Treatment of clothes, discharge, etc.*—All soiled linen, articles of clothing, etc., should be removed in a pail containing 1 in 500 perchloride of mercury lotion, taken direct to the incinerator, where a good fire being in readiness, the contents of the pail are burnt. All excreta and discharges should be received in or scraped into a pail containing perchloride of mercury lotion 1 in 500 and conveyed to a distance not less than 500 yards from any habitation, water source, etc., and there buried at a depth of not less than 18 inches from the surface.

When a passenger travelling alone dies in a train, and there is reason to attribute the death to an infectious disease, the corpse must be removed at the first station and handed over to the police. The carriage must also be shunted off at the same station and not used again until it has been thoroughly disinfected as prescribed above.

When the passenger is accompanied by relatives who wish the corpse taken forward to destination, and are prepared to pay for the full reserved accommodation of the carriage, all other passengers riding in the vehicle must be provided for elsewhere and the carriage must be strictly reserved and attached to the back of the train. Such a carriage is not to be afterwards used until it has been thoroughly disinfected as prescribed above.

When, under section 71 of the Indian Railways Act, 1890, an intending passenger notifies to the Railway authorites and obtains reserved accommodation :—

(1) such accommodation can only be given as a third class carriage or covered goods wagon;

(2) such reserved carriage should always be attached to the end of the train.

Similarly, when it is found necessary to haul a contaminated carriage from one station to another it should, after being closed, locked and labelled "To be disinfected," be attached to the end of a train.

In every case where a passenger dies in a railway carriage, the carriage is disinfected and treated as if the cause of death was an infectious disease.

(Sd.) H. W. McCAULLY HAYES,

M.R.C.P., D.P.H.,

Chief Medical Officer.

(No. 247, dated Villupuram, the 7th October 1915.)

From—W. Nugent, Esq., Senior Apothecary, South Indian Railway,

To—The Chief Medical Officer, South Indian Railway, Trichinopoly.

I beg to inform you that a female passenger named Yeramma holding 3rd class ticket No. 7655 from Tirupati to Chidambaram arrived here by No. 43 passenger yesterday and was found suffering from cholera. She was removed to the Local Fund Hospital, Villupuram, after being given medicine. The carriage in which she travelled was detached and thoroughly disinfected, as also the platfom.

Statement "*B.*"—Shows the list of festivals notified by the Traffic Department to the Medical Department of the South Indian Railway as requiring special arrangements during the festival.

The medical requirements for the large numbers of passengers attending these festivals are amply provided for. Stretchers are kept in readiness to convey the sick if necssary to the nearest hospital. A report is sent to the Chief Medical Officer by the apothecary attending the festival on the conclusion of the festival.

Special attention is given to the arrangements for water supply to the passengers and extra watermen are appointed. So also latrines and sweepers are arranged for.

STATEMENT B.

List of festivals for which special arrangements are made.

Madura	Chittarai Festival	Four extra temporary sweepers are appointed for 15 days.
Rameswaram	Thai Amavasai and Audi Amavasai festivals	Six extra temporary sweepers are appointed for 10 days for each festival.
Mayavaram	Thulakaveri festival	Four sweepers are appointed for 30 days.
Tiruvalur	Rudrapatham festival	Three temporary sweepers for 10 days.
Mutupet	Kandiri festival	One sweeper for 7 days.
Negapatam	Velanganny festival	Four temporary sweepers at Negapatam and 2 at Tiruvalur for 15 days.
Nagore	Kandiri festival	Four sweepers for 8 days.
Chidambaram	Arudradarsanam and Aunithirumanjanam festivals.	Four temporary sweepers for 10 days for each festival.
Tiruvannamalai	Karthigai festival	One apothecary on special festival duty will be placed at these stations during the festivals for 10 days or more as required. Temporary sweepers are appointed by the Traffic Department, but they are placed under the control of the Medical Department.
Conjeevaram	Garudothsavam festival	

An apothecary with medicines attends each of these festivals. On the conclusion a report is sent to the Chief Medical Officer by the apothecary.

Water carriers for all the festivals are appointed.

Extra latrines are provided during festivals at all places when they are required.

A list of medicines and appliances which apothecaries carry with them will be found in the accompanying statement.*

Statement "*C.*"—Shows the number of cases in which medical assistance was given to passengers during the period from June 1914 to May 1915; and statement "D" shows the number of dead bodies removed from trains during the same period.

The total number of passengers carried by the South Indian Railway exceeds 395 millions during last year.

STATEMENT C.

Statement showing the number of cases of illness among passengers and attended by Railway Medical Staff for the period from June 1914 to May 1915.

Apothecary's section.	Disease.	Number.
Negapatam	Malarial fever	1
	Rheumatism	1
	Injuries	2
Tiruvallur	Starvation	1
	Cardiac failure	1
	Cholera	1
	Chicken-pox	1
Tanjore	Multiple injuries	6
	Heart failure	4
	Premature labour	1
Cuddalore, O. T. ..	Dysentery	2
	Diarrhœa	2
	Injuries	2
	Fever	1
Villupuram	Local injuries	5
	Cholera	3
	Digestive system	1
	Eye disease..	2
	Pyrexia	1
Trichy. Junc. ..	Cholera	4
	Normal labour	1

*Not reproduced.

Apothecary's section.	Disease.	Number.
Madura	Eye disease	6
	Malarial fever	8
	Influenza	3
	Diarrhœa	6
	Ear	2
Tinnevelly Bridge ..	Diarrhœa	1
	Contused wound	2
	Malarial fever	1
	Colic	1
Mandapam	Cholera	2
	Dysentery	1
	Malaria	2
	Nervous system	2
	Disease of eye	2
	Diarrhœa	4
	General disease	4
	Digestive system	3
	Respiratory system	2
	Urinary system	2
	Ulcers	4
	Skin diseases	2
	Injury	3
	Snake-bite	1
Dhanushkodi ..	Confinement	2
	Fever	1
	Chicken-pox	1
Salem	Injuries	5
	Labour pain	1
	Biliousness	1
Erode	Fever	4
	Colic	1
	Contused wound	1

Apothecary's section.	Disease.	Number.
Erode—*contd.*	Miscarriage	1
	Infantile convulsions	1
Podanur	Cholera	1
	Fever	3
	Starvation	1
Palakodu	Cholera	1

H. W. McCAULLY HAYES,
M.R.C.P., D.P.H.,
Chief Medical Officer.

STATEMENT D.

South Indian Railway Company, Limited.

Statement showing the number of dead bodies removed from trains for the period from June 1914 to May 1915.

Apothecary's section.	No. of dead bodies removed.	Probable cause of deaths, etc.
Madras	1	Cardiac failure.
	1	Heart failure.
	2	Natural cause.
Villupuram	2	Cholera.
Cuddalore, O. T.	1	Natural cause.
Tanjore	1	Still born child.
	1	Dropsy.
	1	Cholera.
Madura	1	Dropsy.
	2	Cholera.
	1	Old age and starvation.
	1	General debility.
	1	Malarial cachexia.
Tinnevelly	2	Malaria.
Quilon	1	Failure of heart.
Mandapam	1	Cholera.
	2	Fever, malarial.
	1	Circulatory system.
Podanur	1	Heart disease.
	1	Malaria.
Shoranur	1	Malaria.
Mangalore	2	Natural cause.

H. W. McCAULLY HAYES,
M.R.C.P., D.P.H.,
Chief Medical Officer.

APPENDIX II.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

G. O. No. 832-M., 22ND MAY 1909.

Report of the Collector of Tanjore on the arrangements made during the Mahamakham festival at Kumbakonam in 1909.

READ—the following papers :—

I.

No. A. C.-1903-4—151, dated Trichinopoly, the 11th March 1909.

From—NEVILLE PRIESTLEY, Esq., Agent, South Indian Railway,

To—The Chief Secretary to Government of Madras (Local and Municipal Department).

Now that the Mahamakham festival is practically over, I desire to bring to the notice of the Madras Government the services of Mr. N. E. Q. Mainwaring, Superintendent of Railway Police, and of the Railway Police.

2. At out-stations the force had been considerably weakened and a good deal of inconvenience was experienced on account of the number of men left being inadequate for the work. At Trichinopoly Junction and Fort this was especially noticeable, and the assistance of the District Police and of the local regiment had to be sought to help the Railway Police to control the crowd.

3. At Kumbakonam the entire Police arrangements at the station were under Mr. Mainwaring's personal supervision, and when the return rush of traffic began, it was soon made evident that the Police force here also was inadequate, and that the presence of an European officer was necessary to control the crowds. The subordinate force was supplemented from the District Police, but the supervision of them was still left to Mr. Mainwaring alone.

4. This threw on him personally an amount of work which he succeeded in carrying through only by most unusual exertion. I cannot speak too highly of the way in which he devoted himself to his work.

5. The entire force worked very well indeed and it gives me great pleasure to acknowledge their services generally and Mr. Mainwaring's services in particular.

II.

No. D. Dis.-1421-Rev., dated the 25th March 1909.

From—J. P. BEDFORD, Esq., I.C.S., Collector of Tanjore,

To—The Secretary to Government, Local and Municipal Department (through the Sanitary Commissioner with the Government of Madras).

I have the honour to submit, with reference to the recent Mahamakham festival, (1) a report from the Chairman of the Kumbakonam Municipality, (2) a report from the District Superinendent of Police, with a covering letter from the Deputy Inspector-General of Police, (3) a report from the Sub-Collector, (4) a report from the Assistant Collector, (5) the enclosures and statements accompanying and explaining these reports.

2. The magisterial and municipal arrangements were in Mr. Moscardi's charge though, as regards his judicial duties, he was assisted by the Assistant Collector Mr. Matheson. The Police (except those within the railway precincts) were controlled by Mr. Cardozo, subject to general superintendence and advice by Mr. Robertson, the Deputy Inspector-General of Police. These officers have reported in detail on the arrangements in connection with their respective departments.

3. The arrangements to be made in connection with the festival formed the subject of deliberation and discussion, stretching back to last June. Several conferences were held, attended, from time to time, by (1) the chief District and Municipal

officials, (2) the Sanitary Commissioner, (3) Railway officials, (4) representative members of the non-official community of Kumbakonam. The conclusions finally arrived at were embodied in this office Circular No. R. C. 769-G. and B., dated 5th December 1908 (page 103 of this report), published in the District Gazettes for January and February 1909. Mr. Moscardi has followed the order of the circular in his report, and it will be observed that its provisions seem to have been adequate and were followed with hardly any deviation. It will therefore, I hope, be found to be useful, as a starting point, when arrangements have to be made for the next festival in 1920. The same comment applies to the admirably conceived Police circulars and, I may say, to all general or subsidiary instructions issued in connection with the festival. It was an immense relief to us all to find how smoothly the circumstances adjusted themselves to our administrative frame-work.

4. The chief objects were (1) to keep the town healthy, (2) to protect persons and property and to preserve order, (3) to regulate traffic (*a*) on roads, (*b*) on the Railway, (4) to keep the comfort and enjoyment of the visitors steadily in view throughout. As far as I can gather, these objects were achieved. There was practically no grave crime and not a single case of serious accident or illness. The streets were crowded to suffocation, but there was no confusion or disorder. I and the other European officials repeatedly walked through the town at various times of the day and night by ourselves, but never found the faintest suggestion of disorder or obstruction. Never in my past experience have I seen a mass of people at once so orderly, so considerate, and so set on pleasing and being pleased, under what would seem to be such singularly unpromising conditions. This, coupled with what I have been able to gather from correspondence and conversation, leads me to believe that our arrangements must have been popular. Had it been otherwise, resentment might have been disguised, but discontent could hardly have escaped notice.

5. It may not be out of place, if I summarize what seems to me to be the chief administrative factors which contributed to results which none of us could have ventured to anticipate. First, as to the public health, the chief enemies to be warded off were (1) plague, (2) cholera, (3) the malaise and predisposition to diseases of all kinds, which is the normal result of bad or insufficient food, insanitary conditions, extreme depression or discomfort, and so forth. Freedom from plague (which was epidemic at the time, within 200 miles of Kumbakonam) is mainly to be attributed to the decision of Government to prohibit the attendance at the festival of persons from infected areas (G. O., Mis. No. 27-P., dated 6th January 1909). The possibility of enforcing this prohibition with any degree of success depended on the existence of the general system of plague administration which characterizes this Presidency. I venture to doubt whether there is any other part of India where a concourse of 700,000 people could take place, without a violent outbreak of plague as an immediate sequel.

6. As usually happens, the rules failed theoretically and succeeded in practice. There was some failure at first to realize the effect of the notification, and people began to appear in some numbers with punched tickets. Happily, this was discovered about the 18th of February, and wires were sent to all inspection stations. Some persons, however, evaded the rules and appeared with passports in the town. Persons with punched tickets could be and were re-booked at the railway station. Persons with passports could only be observed and prosecuted. Mr. Matheson's report deals with these cases. Exceptions had to be made in the case of (1) police constables, etc., on duty, (2) persons of rank. I also allowed access to persons bringing exhibits from Mysore to the local exhibition.

7. The town mainly owes its freedom from cholera (a freedom seldom vouchsafed to it, even in normal conditions) to the forethought of its sanitary advisers—Major Clemesha and Mr. Morgan. The water-supply (described in detail by Mr. Moscardi) was perfect, and was highly appreciated by the townspeople. The prohibition to take water from the beds of the Cauvery and Arasalar caused that degree of temporary dissatisfaction which is inseparable from any derangement of use and wont. The order was a necessary complement to the arrangements of the Sanitary authorities and was quickly accepted. That all these arrangements should have been of a purely temporary character is distressing, though inevitable. Mr. Moscardi notes that cholera has broken out again, coincidently with the renewal of the bad old

practice of taking water from the river-beds. Had the distinguished residents of Kumbakonam, who petitioned Government to relax these prohibitions, had their way, cholera would, by this time, have been spread over the length and breadth of India. It is worth mentioning, in this connection, that the absence of cholera was as unexpected as it was welcome. I have heard of many persons who were kept away from the festival by their fear of an epidemic. I may add that inspection stations were established at ten points all round the town, to hold up cases of suspicious sickness. Details as to this part of the arrangements will be found in Mr. Matheson's report, which is illustrated by a map. These inspection stations served a subsidiary purpose, in regard to the registration of arrivals by road. Similar arrangements were made to check arrivals by rail, but these will be touched upon in another connection.

8. The original arrangement, as mentioned in my circular, was that the Cauvery should be kept dry for the first eight days of the festival, but allowed to flow on the 5th and 6th of March. As a fact, it remained dry throughout the whole festival. One newspaper stated that this caused some dissatisfaction; but I heard no hint of this from any other source. The change of programme was deliberate. On the 3rd or 4th of March, the Executive Engineer informed me that, do what he would, nothing but a trickle of water would reach Kumbakonam. I thereupon asked him to keep the river dry. Cholera was then prevalent at Tiruvadi, a few miles up the river. A sluggish and insignificant stream of water coming from an infected source involved possibilities of reciprocal contamination, which I did not dare to face. I speak under correction, but my information was and is that there is no special ceremonial importance attached to a bath in the Cauvery, as the sequel to a bath in the Mahamakham tank. For the rest, I do not ignore the religious and sentimental associations bound up with the Cauvery; at the Mahamakham of 1897, another (and, perhaps, the most powerful) motive for a bath in the Cauvery was furnished by the fact that the Mahamakham tank on that occasion was a mass of black mud, which formed a thick caked surface on the bathers. Under such conditions, the pleasure of a subsequent bath in the river (which was in full flood in 1897) is explainable enough. This year, the tank had been completely cleared, and the pilgrims were stepping on sand or rock, instead of churning up 6 feet of mire. I submit, therefore, that the best course to be followed in future festivals is (1) to keep the tank clean and (2) to keep back the river, unless a full flood can be ensured.

9. Before I touch on the measures taken for ensuring the general health, it will be desirable to indicate the general circumstances which the authorities had to face. From the middle of February, the town began to fill up but only gradually, and people began to predict that the festival would be a failure; but, from the first of March onwards, the rush of pilgrims increased in a sort of geometrical progression, until on the 6th they reached a total of nearly seven lakhs, that is to say, about ten times the normal population of the town. For two or three days, the streets were a serried mass of people, the houses and verandahs were packed to overflowing and a misty dampness hung over the whole town. Plainly, no arrangements can ensure health in such conditions. In 1897, drenching rain fell at the height of the festival. This must have caused untold misery and discomfort. Warned by the knowledge of this, we made all arrangements, with a view to this possibility; but, happily, there was no rain, with the exception of a smart shower, about the 20th of February. Two points engaged special attention: (1) conservancy, (2) food-supply. Of the work of the conservancy staff, I cannot speak too highly. Throughout the festival, the town was a model of cleanliness and decency. The general scheme mainly represented the result of the Sanitary Commissioner's wide experience and expert knowledge; the execution mainly fell to Mr. Moscardi, whose enthusiasm communicated itself to his assistants and subordinates, with the gratifying results which he has described in his own report. The general plan, having been found to be adequate, may be safely recommended for adoption for future occasions of the kind.

10. I may touch here on the work of the Special Magistrates. From the start, I had deprecated any but the most sparing use of their magisterial powers and, in practice, their chief duties were to see to the cleanliness of houses and backyards and the proper quality of the food-supply and to warn all concerned of the necessity for sanitary habits and conduct. They performed their duties in a quiet unostentatious way and seem to have done much to promote the health and comfort of the visitors. It also says much for the honesty and public spirit of the local merchants

that there should have been no attempt to fleece the pilgrims by putting inferior food on the market or by attempting to raise prices unduly. Some provision had been made against such a possibility, but it proved unnecessary to resort to any official pressure. To the plentiful supply of good food, I largely attribute the general good health and cheerfulness. The pilgrim-sheds deserve notice in this connection. They accommodated 10,000 people. None of them were put on low-lying ground. This detail is worthy of note, as a guide for the future, for not only is it a precaution against possible rain, but it is also a sound measure, with reference to the general health of the occupants. The sheds were crowded throughout.

11. I may add a word in this connection as to the tank itself. From the 1st of March, it was disinfected nightly with chloride of lime (liquor), under the personal supervision of the Sanitary Commssioner. This proved most effective. I may add that this procedure met with no opposition, from the point of view of popular feeling. One old lady was heard explaining to a friend that it was good sort of stuff and "just like soap." The description is not very happy, but was clearly meant friendly. At the close of the 6th, the tank was distinctly offensive to the sense of smell. It has since been cleaned out again. It will be well to note here that strong engines are necessary for getting the water down to its proper level and keeping it at that level, especially now that the silt has been cleared away and the springs are exposed. The Municipal engine, augmented by a powerful engine provided by the District Board, proved barely sufficient for the purpose. This is worthy of note, with reference to future festivals, as an untimely rise of the water in the tank would make bathing highly dangerous, if not impossible, and thus mar the whole festival. The excellent work done by the Municipality in originally clearing the tank has been dealt with in G. O., No. 1833 M., dated 7th November 1908. One result of the cleaning of the tank was to expose the wells in the bed. With a view to averting accidents, the wells were boarded over and their situation indicated by flags. Groups of pilgrims could be seen going round from well to well, performing their devotions at each in turn; great sanctity attaches to these wells. The enthusiasm of the pilgrims led to the flags being wrenched away from time to time and having to be replaced. I would suggest that, at the next festival, it would be well to have these wells *strongly* fenced round, as well as indicated by flags. From a purely administrative point of view, the simplest thing would be to have the wells filled up and levelled, but the alternative would be more in accordance with popular feeling. In any case, an accident from falling into them is a serious matter, which needs to be guarded against.

12. Coming now to the measures taken for the public safety, I may note that (1) there was hardly any grave crime, (2) that nuisance and other petty cases were far fewer than usual; it follows that the magisterial work, strictly so called, was very little. The credit for this eminently satisfactory state of things must be given to the Police. The behaviour of the force formed the subject, not only of enthusiastic commendation, but also of undisguised astonishment. One local publication remarks that, for the first time, the Police behaved "like London Police." The comparison is apt enough; for, instead of bustle, self-importance and roughness, we saw constables directing wayfarers, helping the aged and infirm, telling children where to find their mothers, telling mothers where to find their children, and all this with a degree of urbanity and quiet dignity, of which the famous Metropolitan Police Force need not have been ashamed. Beyond all doubt, this attitude on the part of the Police helped to infuse a general spirit of order and respect for law. The way in which the people worked out a rule of the road was most remarkable. I have heard stories of the crushing in 1897 being so great that European officials were carried off their legs and whirled this way and that; but on this occasion any one could approach the tank at any time and from any side without inconvenience.

13. That Mr. Robertson, Mr. Cardozo and the Deputy Superintendent, Mr. Manickavasaka Nadar, should have been able to infuse so commendable a spirit into an heterogeneous body of men, brought together from all over South India, is a remarkable achievement, of which I venture to think they may be justly proud; their hands were immensely strengthened by the orders of Government under which the force were fed and housed free and their comfort looked after

in every possible way. I submit that this seems to point a moral, with reference to future Mahamakhams and also perhaps other large gatherings of people. A big fair or festival means high prices and scanty accommodation; if no special provision is made for the constable who comes from a distance, his special duty means, not only that he is heavily fined, but also that he has to fight for bare subsistence; and he has fatal facilities for doing so. Hence, oppression and false cases; hence, smouldering discontent, which, under favourable conditions, may flare out into serious rioting. I may note, in this connection, that some of the district subordinates, who had come from other places, were provided with food (raw or cooked, according to circumstances) from the local chattrams under District Board management.

14. The details of the administration of the Police force are dealt with in the Superintendent's report, but I would add a word as to the carriage regulations. For the last four or five days of the festival, all carriage traffic was prohibited along the main streets, though they had to be used as crossings. For one day, there was some misunderstanding as to the scope of the orders; this was remedied by their publication, through the agency of the Municipal Chairman and the Secretary of the Local Club; but one or two of the more distinguished residents and visitors continued to manifest resentment at the restrictions, one gentleman calling on me, armed with a surprising suggestion that 10,000 flags on bamboos should be put up at street corners at a day's notice, with some undefined object. Selfishness is not likely to die in twelve years; I therefore beg to place on record that the traffic regulations imposed on this occasion were absolutely indispensable in the interests of the vast majority of the visitors, and did actually conduce to the general comfort and satisfaction. As regards the arrangements at and near the tank, the District Superintendent of Police and I had the advantage of Mr. Mainwaring's experience of the previous festival. The arrangements adopted as to barriers on this occasion differed very slightly from those adopted in 1897 and proved adequate. The cleaning out of the tank made it possible for the *whole* tank to be, for the first time, thrown open to the pilgrims. This greatly relieved the crushing. The tendency of families and villagers to almost literally stick together (in the tank and in the streets) had excellent results in practice. These groups may well have been the nucleus from which the rule of the road, mentioned above, eventually evolved. One other element which conduced to order and prevented accidents was the excellent lighting of the town by the Municipal authorities. The lighting continued throughout the whole of every night, the moon being (very properly) ignored from this point of view.

15. It remains to say a few words in regard to the railway arrangements. These formed the subject of several discussions with the railway authorities, who showed all possible readiness to comply with suggestions made from a police or sanitary point of view. In general, however, their arrangements called for admiration rather than criticism, neither money, ingenuity, nor hard and unremitting work being spared, where the comfort or safety of the pilgrims was concerned. On the whole, I am glad to think that these efforts received the public appreciation which they deserved. Such complaints as I came across, came, not from pilgrims, but from local persons, who seemed to expect that the conveyance of 50,000 pilgrims a day was no excuse for delay in providing them on demand with first or second class accommodation. What I have said of the regular police applies to the Railway Police (also fed and lodged at Government expense), except that their work was rougher and more of a physical strain, lasting without intermission, day and night, for four or five days. It would be pleasant to enlarge on this subject, as the railway compound, from the 6th to the 9th, was a most impressive sight, but this aspect of the matter hardly falls within my province. I would only add that (1) it was generally recognised that the railway officials would have been saved a good deal of trouble, if there had been more exits than one to the temporary waiting-sheds (barriers *within* the sheds might also have eased the strain), (2) the Railway Police force proved too small a body for an emergency of this kind. Mayavaram, Tanjore and Trichinopoly junctions were found in the event to require almost as much attention as Kumbakonam itself. At Kumbakonam, the Railway Police were augmented from the 7th onwards by 100 of the District Police.

16. Medical inspection was arranged for at Kumbakonam, as well as at Mayavaram and Tanjore, the object being the same as that described in the concluding portion of paragraph 7 above. The staff at Kumbakonam was also used to turn back persons with punched tickets (*vide* paragraph 6 above). In this connection, I am under obligations to Mr. Neville Priestley, the Agent of the Railway, (1) for modifying his exit arrangements, so as to suit the convenience of the inspecting staff, (2) for kindly allowing me to build quarters for the staff within the railway precincts.

17. In paragraph 4 above, I included a separate heading, in regard to the provision for the comfort of the visitors, but, in commenting on the various arrangements from other points of view, I have exhausted all that I had to say on this aspect of the subject. I would only add that the Municipal Council proved itself of great assistance, as an agency for popularising and explaining our measures and objects. Mr. Moscardi has mentioned the names of several councillors in his report. I would single out the name of Mr. N. Krishnaswami Aiyangar, the Vice-Chairman, in this connection. His co-operation with the officials and his uniformly wholesome influence on the popular temper supplied a most valuable link in the chain of administration.

18. For almost all the local officials, the festival was a time of storm and stress, as well as anxiety. The functions assigned to each officer are indicated, either in the course of this report or in the reports which form enclosures thereto. The chief responsibility fell on Mr. Cardozo and Mr. Moscardi; I have alluded to the excellence of their work in paragraphs 9 and 13 above; but, where all did their duty and did it in the right spirit, it is difficult to single out names. We local officers are all under obligation to Major Clemesha, the Sanitary Commissioner, for guidance and encouragement at every stage. I had reserved for myself the rôle of rectification of errors and general supervision, but found my post almost a sinecure.

19. A list of the enclosures to this report is appended.

List of Enclosures to the Report on the Mahamakham Festival.

1. Report No. R. O. C.-108-E.C.R. of 1908, from the Chairman of the Kumbakonam Municipality, dated 13th March 1909.
2. Report No R. C. 858-Genl. of 1909, from the District Superintendent of Police, dated 15th March 1909.
3. Letter No. R. O. C.-568-Genl. of 1909, from the Deputy Inspector-General of Police, Coimbatore, dated 19th March 1909.
4. Report No. R. C.-645-E.C. of 1909, from the Sub-Collector, dated 20th March 1909.
5. Report No. R. C.-7-A.C. of 1909, from the Assistant Collector and Magistrate, dated 13th March 1909.
6. Map forming an enclosure to the Assistant Collector's report.
7. Collector s circular R. C. No. 769-G. and B. of 1908, dated 5th December 1908.
8. * * * * * * * * * *
9. Notice, dated 28th January 1909, under section 144 of the Criminal Procedure Code, regarding the regulation of water-supply.
10. List of tanks and wells reserved for particular purposes.
11. Notice, dated 30th January 1909, under section 144 of the Criminal Procedure Code, requiring all owners and occupiers of houses to whitewash them and to keep the premises neat and clean in all respects.
12. Circular, with police instructions in regard to the Mahamakham festival.
13. Rules for the working of the Railway Police during the festival.
14. Rules for the guidance of the sanitary and medical staff during the festival.
15. Appendix.

ENCLOSURES.

No. R. O. C.-108-E.C.R., dated the 13th March 1909.

From—A. F. G. Moscardi, Esq., I.C.S., Chairman, Municipal Council, Kumbakonam,

To—The Secretary to Government, Local and Municipal Department (through the Revenue Divisional Officer, Kumbakonam, and the Collector of Tanjore).

I have the honour to submit my report on the Mahamakham festival just closed. This is the most important religious festival in Southern India, and attracts pilgrims from all parts of India, though chiefly from the districts south of Madras. This

time the number of pilgrims by far exceeded that on the previous occasion and the original anticipations. The railway brought in 230,000 between 25th February and 6th March and the account at toll-gates from 1st to 6th March works out to 5,88,000, making a total of 8,18,000 in round numbers.

2. The festival commenced on the 25th February and closed on the 6th March, the tenth day of the festival. The special arrangements were started on the 15th ultimo and continued till the 15th instant and are carried on by the Municipality under the guidance of the Collector, who has been camping here since the day when the special arrangements were organised. The arrangements, which on this occasion included the thorough clearance of the Mahamakham tank of the accumulated silt of many generations—*vide* G. O., No. 1833-M., dated 7th November 1908—at a cost of Rs. 16,000, and the supply of drinking water from the central artesian boring for a population of nearly 15,000 at a special expenditure of about Rs. 5,500, have been estimated to cost nearly Rs. 43,000 against Rs. 25,360 of 1897. This extraordinary strain on the Municipal funds was relieved by the benevolent help afforded by Government, who have till now made a grant of Rs. 22,290 on account of sanitary arrangements—*vide* G. Os., No. 1025-M., dated 29th June 1908, and No. 270-M., dated 23rd February 1909,—and have further requested the District Board, Tanjore, to report whether it is prepared to make any contribution towards the cost of the arrangements in the town. A full and complete report of the expenditure on account of the festival will be possible only in April, as the arrangements themselves are to continue till the 15th of March, and all disbursements on that account have to be made on claims preferred and on bills checked and passed after that date.

3. The festival has a hold on the minds of the people which is not equalled by any other in the Southern Presidency. The centre of holiness is the sacred Mahamakham tank, which, as tradition goes, is the spot where the nectar pot containing the fruit of past universes and the seeds of future humanity rested after floating down from the top of the sacred Mount Meru in the Great Deluge. Its waters on this occasion when Jupiter enters Leo are considered to possess power to purify the holy waters of the Ganges and similar rivers which, though able to absolve those who plunge in them from all sins, cannot wash off their own except by a bath in the Mahamakham tank. Such is the sanctity of the tank, which attracts thousands of people at the auspicious time.

The arrangements made may be conveniently described under the various headings dealt with by the Collector in his Circular R. C. No. 769-G. & B., dated 5th December 1908.

4. *I. Sanitary*—(*a*) *Water-supply.*—The beds of the Cauvery and the Arsalar on either side of the town were kept completely dry during the festival. The water-supply consisted of—

(1) fourteen sanitary tube wells sunk on the sides and flood banks of the rivers ;

(2) thirty-five Municipal wells reserved for drinking alone, the best of them, twelve in number, being fitted with pumps and zinc tubs with three discharge cocks, and the rest with Municipal buckets ; and

(3) the central artesian boring which was worked with success and opened on 4th March to public use. The artesian spring water came up into a well sunk to a depth of 28 feet below ground level, and water was pumped from this well into four iron tanks placed 16 feet above the surface, by a Merryweather fire engine from the Public Works Stores. The pressure was sufficient and the supply at all the twelve taps was equal to the demand, in spite of much waste. The tube wells and the Municipal wells already mentioned had a watchman each and the wells fitted with pumps had two each in view of the constant demand for water. Private wells in houses supplemented the above supply and the town was thus equipped as far as possible with an uncontaminated supply of water throughout the festival. The public were warned by tom-tom and by free circulation and posting of leaflets against the danger of drinking the river and channel water ; and the Collector also issued a notification under section 144, Criminal Procedure Code, prohibiting the public from taking away water from the Cauvery for any purpose (except temple Abishegam purposes).

There was a little discontent at the prohibition at first, but it gradually wore out and was forgotten before the end of the festival, and the efforts of certain persons to make a public grievance of it proved quite unsuccessful. It is to this prohibtion, and to the sufficiency of the police to enforce it, that the town owes its freedom from cholera during the festival. In ordinary years cholera is inevitable at this time of the year, owing to the use by the public of the water which stagnates under the dry sand of the river beds; and this year too the withdrawal of the special arrangements to prevent the use of such water has been followed (up to date) by two cases of cholera in the neighbourhood of the Cauvery. Special ponds were reserved for the use of cattle and were guarded against use by people. Certain wells and ponds were closed and fenced and watchmen posted to prevent their being used. The tanks and wells reserved for bathing were notified and their proper use watched. The water of the Mahamakham tank was baled out and the level reduced to 3 feet, 3 days before the last day of the festival. The Sanitary Commissioner conducted the disinfection of the tank by chloride of lime which was commenced on the 1st March and vigorously continued till the 6th, the Mahamakham day. The Pottamarai tank level was also reduced to 3 feet before the festival commenced, but no disinfection of the water was attempted, as the Sanitary Commissioner was of opinion that anything spent on it would only be a waste in view of the semi-solid state of the green liquid. No water-pandals were erected by the Municipality, nor was any necessity felt for them as private charity was more than equal to the demand. No efforts were spared to see that the water sources arranged by the Municipality were always kept in good order and satisfied the public requirements.

	Names of Councillors.	Ward No.
1.	M. R. Ry. T. S. Subramaniya Aiyar Avargal	I
2.	M. R. Ry. A. C. Narayanaswami Aiyar Avargal	I
3.	M. R. Ry. R. Chackrapani Chettiar Avargal	II
4.	M. R. Ry. S. Krishna Aiyar Avargal	II
5	M. R. Ry. G. Narayanasami Aiyar Avargal	II
6.	M. R. Ry. Swaminatha Chettiar Avargal	III
7.	M. R. Ry. S. Sivagurunatha Chettiar Avargal	III
8.	M. R. Ry. R. C. Gurunatha Pillai Avargal	IV
9.	M. R. Ry. M. K. Ramachandra Chettiar Avargal	V
10.	M. R. Ry. U. Lalkhan Sahib Avargal	V
11.	M. R. Ry. C. K. Strinivasa Aiyangar Avargal	VI
12.	M. R. Ry. M. C. N. Muthukomara Chettiar Avargal	VI
13.	M. R. Ry. Rao Bahadur S. Appu Sastri Avargal	VII
14.	M. R. Ry. T. Krishnaswami Aiyangar Avargal..	VII

5. (*b*) *Conservancy.*—The sanitary arrangements were in charge of the Civil Apothecary aided by the Municipal Secretary and carried out subject to the instructions of the Sanitary Commissioner and the direction of the Chairman and the Vice-Chairman. The marginally noted Councillors were requested to help the Chairman and the Executive in the supervision of the sanitary arrangements in their wards noted against each. They readily responded and were of great service. The Chief Sanitary Inspector with two mounted orderlies and the seven Sanitary Inspectors of the seven wards of the town carried out the instructions thoroughly, helped by the 17 maistries of the 17 blocks into which the wards were divided as below:—

	Blocks.
Ward No. I	3
Do. II	3
Do. III	2
Do. IV	2
Do. V	2
Do. VI	3
Do. VII	2
Total ..	17

6. Besides the 17 block maistries the additional menial staff consisted of 34 peons, 2 mounted orderlies, 85 sweepers and 160 scavengers. The additional plant was composed of 51 rubbish carts, ten nightsoil carts, ten nightsoil hand carts and 100 nightsoil buckets.

7. The number of toties originally arranged was found inadequate to meet the demands which suddenly came to notice from the Police camp and from the camping places of heads of mutts, Zamindars, etc., and from the public eating places. This resulted in a further indent for 50 more scavengers and 50 buckets. All the additional menials were supplied by M. R. Ry. N. Seshadri Raju, the Madras Conservancy Agent, and it should be here recorded that all the people he supplied were invariably found useful and equal to the work given them. This was very satisfactory and beyond expectations. The recruitment was from Nellore and other places and the success of the selection reflects much on the capacity of the Conservancy Agent.

8. Forty additional latrines of bamboo mat tatties were provided in places carefully selected and were largely used. The floor of each latrine was covered with 8 inches of sand and a heap of sand was also stored close by. Each latrine had one or two toties according to the necessity and every time the floor was used, it was cleaned by the toties stationed beside. Each latrine was also provided with a wooden tub always kept full of water, a zinc bucket, and a tin vessel for washing. A special light was posted near each latrine. A urinal was put up near the Big Bazaar Street with four tarred iron drum buckets and the urinal was frequently emptied by the toti into the sewage carts. An adequate supply of disinfectants and other materials was got ready in time and the latrines were frequently disinfected and sprinkled with deodrants. All the important roads and streets were thoroughly watered by a special establishment.

9. The cholera observation establishment was greatly useful in constantly patrolling the streets to detect any infectious diseases, in inspection of backyards and in keeping the rubbish and nightsoil depôts in good order throughout.

10. Rules were framed in consultation with the District Medical and Sanitary Officer, for the guidance of the conservancy staff and they were correctly observed.

11. The District Magistrate issued a notification under section 144, C. P. C., calling on all owners and occupiers of houses, etc., (1) to whitewash their buildings both inside and outside, (2) to clear their backyards of all rank and noxious growth, (3) to keep their premises and backyards and the surroundings free from dirt, and (4) to keep all wells in the backyards fenced and the water thereof uncontaminated. This, coupled with a very large number of notices issued by the Municipality for the improvment of backyards, resulted in effecting and maintaining the cleanliness of the town to a remarkable degree. The clean streets and backyards, the thorough conservancy of latrines etc., the white frontage of dwelling houses and the regular and unfailing conservancy arrangements evoked the unqualified appreciation of the public. Even the tremendously large accumulations on the last two days of the festival did not unsettle the arrangements and the disciplined staff was quite equal to the occasion. Throughout, the work of the conservancy staff and of the Municipal subordinates, whose duty it was to supervise the work, was remarkably good and thorough.

12. (*c*) *Accommodation.*—Relatives and friends of local residents manage invariably to accommodate themselves in their houses, and the choultries, matams, etc., afford sufficient accommodation to others on the occasion of the ordinary festivals. But at the Mahamakham time every available square foot of space is occupied. Twenty spacious pilgrim sheds were provided at convenient places, selected with due regard to the sentiments of the pilgrims who always desire to live, if possible, near the various temples or the sacred tank. Each shed though constructed to contain about 250 people, sheltered double the number on the last days of the festival. In the most popular ones by the side of the Tank road there was barely sitting place for those underneath. Pilgrim sheds are a novel feature in these parts and it is a matter for satisfaction that they were eagerly made use of without any sort of scruples even on the part of Sannyasis and such people, who might be expected to be particular about their lodgings.

Each shed had a watchman, a special lantern within and in several cases wonder lights outside and a tube well or other good source of water-supply close to it. The sheds thus became attractive and served their purpose well.

13. (*d*) *Medical.*—In addition to the Main hospital and the Branch dispensary five temporary dispensaries were opened in convenient parts of the town and were equipped with the necessary staff, appliances, etc. A cholera hospital with 24 beds was opened in a suitable locality just outside the town. There was, however, no opportunity to use it, cholera having ceased a few days before the festival commenced. Five stretchers with 10 bearers were placed at the disposal of the Civil Apothecary who was in immediate charge of the medical arrangements in the inner circle under the supervision of the District Medical and Sanitary Officer. His report on the arrangements is separately submitted.

14. *II. Police and Magisterial.*—The Deputy Inspector-General of Police, Southern Range, and the District Superintendent of Police, Tanjore, were present during the festival and the special arrangements made by them will form the subject of a special report by the District Superintendent of Police. Twelve barricades were erected on the northern and western sides of the tank, besides a long one at the north-western corner stretching to a point in the middle of the junction of the streets, which served to regulate the crowds moving towards the tank. No accident or danger to life and safety was reported and it was extremely satisfactory to observe the mass of humanity marching in perfect order and harmony and moving in naturally formed lines up one side of a street and down the other. The sympathetic and helpful attitude of the police seems to have made a good impression on the public. A life-boat was provided on the Mahamakham tank, for the use of which, however, there was no occasion. One very satisfactory arrangement of the police was " a lost children office " for the temporary detention and feeding of children who were separated from their parents ; and the management of the office was considered admirable by the public. Six additional second-class Magistrates and one first-class Magistrate were drafted to Kumbakonam. The additional six and the Stationary Magistrate were each in charge of a ward of the Municipality for sanitary purposes. Their ambition to prevent rather than to punish crime, was fully realised. The first-class Magistrate was in charge of the arrangements outside the town.

15. *III. Railway.*—Considering the enormous crowds that gathered and left, the railway arrangements could not have been better.

16. *IV. Miscellaneous—Lighting.*—The town was lit up all night for one month from the 15th ultimo. Twenty small Washington lights and 80 ordinary lights were added to the existing number of 12 arc and wonder lights and 756 ordinary lights. Six of the Washington lights were put up by the side of the Mahamakham tank and others were distributed at important parts of the town. Lighting left nothing to be desired and was described by a correspondent as superb.

17. Each grade of the executive, sanitary and conservancy staff was given a suitable badge to distinguish them ; and signboards were provided to mark off the several dispensaries, latrines, camps, reserved tanks, wells, etc.

18. Saturday the 6th was declared a holiday for the district in lieu of the last Saturday but one in the same month.

19. The town enjoyed perfect immunity from any sort of epidemic. The arrangements for detaining and turning back pilgrims arriving from plague infected places at the railway station by six special Hospital Assistants with the existing two passport issuing officers have been dealt with in the Civil Apothecary's Medical Report. Necessary buckets, hooks and other materials for prevention of fire were entrusted to the police and here again there was happily no opportunity for their use.

20. The silt cleared wells in the Mahamakham tank were temporarily covered by planks under sand bags to prevent accidents and their positions shown by flags.

21. *V. Conclusion.*—The Municipal executive have had a very anxious time ; the outbreak of cholera immediately after the festival in 1897 was a lesson to them and no efforts were spared to prevent a similar occurrence now. The festival

arrangements were a success all round and the various officers concerned worked with zeal and in harmony with each other and perfect good feeling prevailed all round. The thorough silt clearance of the tank, the convenient conservancy and police arrangements, the efficient lighting, and the avoidance of epidemics of any kind and the absence of any accidents, were facts which seem to have made a good impression on the public.

The Mahamakham tank water, which has now turned black with dirt, is being baled out so as to completely expose the sand bed once more and allow the clean spring water to rise.

Finally, although the Collector is personally aware of the manner in which all the arrangements for the health and convenience of the public were carried out, I cannot leave the subject without a word of praise for the Municipal officers of all grades. The Civil Apothecary and the Municipal Secretary are two officers who can always be relied upon ; to say that they did their duty is nothing remarkable. But among the subordinate staff, from the Sanitary Inspectors to the toties, no single case of shirking came to the knowledge of the Vice-Chairman or myself, in the course of our general supervision of the work. This refers to the temporary as well as to the permanent staff ; the work of all was satisfactory.

C. R. No. 744, dated 20th March 1909.

Endorsement by the Sub-Collector.

Forwarded to the Collector. As this is my report, I have no remarks to make on it.

No. R. C.-858-Gl., dated the 15th March 1909.

From—F. B. M. Cardozo, Esq., Superintendent of Police, Tanjore,

To—The Collector of Tanjore.

In reply to your R. C. No. 769 of the 8th instant, I have the honour to enclose my report on the working of the Police during the late Mahamakham festival.

Sub-Enclosure.

Report on the Working of the Police.

The festival of Mahamakham fell, on this occasion, on the 6th March 1909. Its preliminaries commenced on the 16th February 1909 and the festival practically closed on the 10th March 1909.

2. Police arrangements were submitted by Mr. Lane in September 1908 on lines similar to those of the occasion of 1897. He suggested the division of the Tanjore district into three circles :—

A.—the inner circle, representing the Municipal limits of Kumbakonam town,

B.—the outer circle, comprising the villages within a radius of seven miles of Kumbakonam, and

C.—the outermost circle consisting of the remaining area of the district.

On reconsideration, proposal ' C ' was knocked on the head as a superfluity, the existing system of patrols having been considered sufficient for all practical purposes, and proposal ' B ' was given up in favour of a system of outposts on the outskirts of the town and at intersections of roads within the approaches of the town in all its directions.

Proposal ' A ' was adopted with only one modification in that the police station in the railway premises provided for in the programme for the last occasion was transferred to the Railway Police.

2 (*a*). For the performa ce of the multifarious duties that devolved on the Police, a force of 10 Inspectors, 100 head constables and 1,050 constables was drafted into Kumbakonam on the 16th February 1909 from—

District.	Inspectors.	Head constables.	Constables.
Trichinopoly	1	10	100
Salem	1	10	100
Madura	1	10	100
Tinnevelly	1	10	100
Coimbatore	1	10	100
North Arcot	1	10	100
South Arcot	1	10	100
Tanjore	4	30	350
Total ..	11	100	1,050

2 (*b*). The Municipal limits were divided into seven sections with investigating centres at—

(1) Principal station on the bank of the Pothamari tank under 3rd class Inspector K. S. Karpagavinayagam Pillai of Kumbakonam Town, assisted by Sub-Inspector Kunjithapadam Pillai of C. 1. Town.

(2) Mahamakham tank under 3rd class Inspector P. Subramania Aiyar of Shiyali.

(3) Pettai under 4th clsass Inspector T. R. Srinivasa Aiyangar of Porayar.

(4) Mela Iyen Street under 4th class Inspector D. Srinivasa Rao of Coimbatore.

(5) Bhagavath Padithorai under 2nd class Inspector Dorairaghavachari of Tinnevelly.

(6) Arasalar under 4th class Inspector Krishnaswami Aiyar of North Arcot.

(7) Melacauvery under 4th class Inspector Subramania Pillai of Arantangi.

The limits of each investigating centre were placed under the jurisdiction of a Sub-Magistrate.

Ten out-posts were established with medical subordinates in charge, in view to the examination of pilgrims coming in by the road, and to the detection of persons suspected of plague, cholera or any other seriously contagious or infectious disease. They were—

(1) The junction of roads Nos. 14 and 15.

(2) The junction of road No. 13 and the Randankatlai village road.

(3) The Sekkankanni road at its junction with Tepperumanallur village road.

(4) Road No. 2 at its junction with the Ammachatram and Tirunageswaram road.

(5) Junction of roads Nos. 5 East and 48.

(6) Road No. 11 at Arasur.

(7) Road No. 59 at Innambur.

(8) Road No. 2 at the eastern limit of Swamimalai.

(9) Road No. 5 West at the junction with the Mangudi village road.

(10) The Pattiswaram village road near Pattiswaram.

There were four constables at each of these out-posts. This formed a separate police division under 3rd class Inspector Venkataramana Aiyar of Salem aided by Sub-Inspector Sivarama Aiyar of Tanjore Town.

2. (*c*) Annexed is a tabular statement showing the disposition of the force and the nature of duties assigned to the several detachments.

Summarized, the force was distributed :—

Station.	Inspectors.	Head constables.	Constables.
Principal station	1	10	134
Mahamakham	1	7	80
Pettai	1	4	68
Mela Iyen street	1	5	38
Bagavath Padithorai	1	8	84
Arasalar	1	5	52
Melacauvery	1	8	68
Out-posts	1	5	40
Special Duties.			
Four fire-brigades	..	4	48
Orderlies	..	..	24
Mahamakham tank	1	10	76
Pothamarai tank	..	3	20
Camp guards	..	3	24
Extra orderlies and Lost property office	..	4	54
Reserve force	1	24	240
Total ..	10	100	1,050

3. *Accommodation.*—There were three spacious camps erected in the Mahamakham station limits for the accommodation of the policemen ordered into the town ; another camp accommodating the reserve was erected at Pettai.

The Government having sanctioned the feeding of all constables employed in the festival duty, kitchens, with feeding sheds attached, were erected in Pettai, and the number of policemen fed there is as follows :—

One thousand and twenty on the 16th and 17th February and 1,031 on each of the days between the 18th February and the 8th March 1909.

4. Each policeman was given a printed memorandum of instructions as to what his duties were. A copy is enclosed (Marked A).

5. " Lost property office " and " Lost children office " (instructions given to the officer in charge are enclosed, marked B and C), were new institutions on this occasion, in charge of Sub-Inspector R. Krishna Aiyar of Nachiargudi.

There were ten cases registered in the former and 211 in the latter.

A few utensils and a few trinkets were unclaimed and they were sent to the Magistrates concerned for disposal. Of the 211 children received, 105 were males and 106 females, of ages ranging from two to eight years. All these children were claimed by their parents or guardians.

6. There were only six cases of theft during the festival from the 15th February to the 10th March 1909. The thieves were arrested in all the cases, three of which ended in convictions and the remaining three await disposal, pending enquiry into the antecedents of the culprits. Property worth Rs. 647 was lost and property worth Rs. 622 recovered.

7. Thirteen policemen were punished for petty delinquencies. Inspector Dorairaghavachari of Tinnevelly did not work satisfactorily. He was the only officer who did not behave well. He was the cause of unpleasant friction between the Police and the Vice-Chairman of the Municipality. Further, after the 6th he and his men ceased work until brought to their senses by the Deputy Superintendent. His halting allowance is recommended to be withheld as a punishment.

8. There was no casualty among the police force.

9. Special features on the occasion were the total absence of "disease" and the almost total absence of "crime." There was not a single complaint against the police during the whole festival.

10. Wheeled traffic was placed under restriction in the principal streets on the important days of the festival, but there was misapprehension which gave rise to complaints on the first day. The misapprehension was removed at once and with it, the cause of complaint.

District Superintendent of Police from 16th February 1909 to 11th March 1909 (both days inclusive).

Deputy Superintendent from 8th February 1909 to 13th March 1909 (both days inclusive).

Inspectors and Sub-Inspectors from 16th February 1909 to 11th March 1909 (both days inclusive).

Note.—Inspector Dorairaghavachari's halting allowance not recommended—*vide* paragraph 7.

Note.—Government has already passed orders on the subject of the men.

11. It is requested that halting allowances may be accorded (*vide* list per margin) for the whole period of their necessary stay in Kumbakonam as was done on the last occasion. This sanction is necessary to meet the Accountant-General's objections.

12. Proposals for future festivals as suggested by the experience gained are—

(*a*) The feeding arrangements should be located at a more central place than Pettai. Mahamakham lines site would be more suitable. A good drinking-water well is absolutely essential. It should be sunk to a considerable depth and well protected against contamination. This should be considered an urgent work as it is required in ordinary circumstances to supply drinking-water to the inhabitants of the permanent police lines at the spot.

(*b*) "Lost children office" should be located in Mahamakham tank station instead of at the principal station. It is on the bank of the Mahamakham tank that most of the children stray or are left uncared for, while the parents or guardians bathe. It would be a boon to the public if a Mantapam on each bank of the tank be set apart for the temporary custody of children, while their relations are engaged in ablution. This was carried out to a certain extent on this occasion and the public fully appreciated the attention.

(*c*) Men on duty at the out-posts should not be fed at the Government shed on the next occasion, as it takes them away from their posts for a considerable time. They complain of the long distances they have to walk. They should be given double batta and they can easily make arrangements for feeding themselves locally.

13. I cannot close my report without paying special tribute to the very good work done by Deputy Superintendent Manikkavasaga Nadar who was sent to Kumbakonam on special duty. Throughout, he was indefatigable in his attention to the behaviour and well-being of the men under his charge and it is very largely due to him that the arrangements made were properly carried out and I am certain that it was his unfailing tact and resourcefulness that explains the entire absence

of complaints against the police. All the Inspectors with the exception already mentioned did their work admira ly. I have special cause to praise the work done by Inspector P. Subbier of Trichinopoly and Inspector K. S. Karpagavinayagam Pillai of Kumbakonam. These two officers were from the 6th onwards placed at the disposal of the Railway Superintendent of Police to assist his staff. Two hundred men from the reserve were also told off to assist the Railway Police until the rush at the railway station ceased.

I estimate the total number of people attending the festival at from 600,(00 to 700,000.

No. R. C.-568-Genl., dated the 19th March 1909.

From—H. Douglas Robertson, Esq., Deputy Inspector-General of Police, Southern Range, Coimbatore,

To—The Inspector-General of Police, Madras.

I have the honour to forward the accompanying interesting report on the Mahamakham festival from the Superintendent of Police, Tanjore.

I visited Kumbakonam on the 13th January and went through the police arrangements, which had been carefully worked out by the Superintendent. I also camped at Kumbakonam from the 26th February to 9th March and personally superintended the management of the festival, but everything went off so smoothly that my duties were comparatively light.

Mr. Cardozo's report speaks for itself. The absence of disease, crime, accidents of any kind, or complaints against the police, testify to the excellence of the Police arrangements and the care and tact with which they were carried out by Mr. Cardozo, ably assisted by the Deputy Superintendent, Mr. Manikkavasaga Nadar. Both officers deserve, I think, to be heartily congratulated on the success of their labours.

The "Lost children office" proved most useful, as shown by the number of children (211) who were reclaimed through it, with as little anxiety as possible to their parents and guardians. It should, on a future occasion, be located at the Mahamakham tank station.

The feeding sheds should also next time be located at a more central place than Pettai. The difficulty was to find a suitable site where there was also a good water-supply. As pointed out by the Superintendent, a good drinking-water well is urgently required at the Mahamakham lines and if one is made there, this would be the best site for the cooking sheds.

The conduct ot the men was excellent and among the Inspectors first-class Inspector P. Subbier and third-class Inspector K. S. Karpagavinayagam Pillai deserve special mention.

In the case of second-class Inspector N. Dorairaghavachari, halting allowance may be withheld for reasons stated by the Superintendent. For the other officers on duty, halting allowances should be sanctioned for the whole period of their necessary stay at Kumbakonam.

In conclusion, I beg to add that our warm thanks are due to the District Magistrate, Mr. Bedford, for his kind help and support in carrying out all the police arrangements.

R.O.C. No. 568-Genl., dated 20th March 1909.

Copy forwarded to the Superintendent of Police, Tanjore, through the District Magistrate, for information.

H. Douglas Robertson,

Deputy Inspector-General of Police.

No. Ref.-645-E.C., dated the 20th March 1909.

From—A. F. G. Moscardi, Esq., I.C.S., Sub-Collector, Kumbakonam.

To—The Collector of Tanjore.

With reference to your R.C. No. 769-G. and B. of 1908, dated 8th March 1909, I have the honour to submit herewith a statement showing the cases tried by the special Sub-Magistrates during the Mahamakham festival and another showing their respective jurisdiction.

2. They entered on their duties on the 15th February 1909 and were relieved of them on the 15th March 1909. All of them except the Stationary Sub-Magistrate, Kumbakonam, had very little to do by way of magisterial work. The bulk of this work lay on the Stationary Sub-Magistrate, who had four sittings in a week to dispose of all Bench cases under the orders of the District Magistrate.

3. All the Sub-Magistrates were chiefly occupied in carefully attending to the sanitation of the town both morning and evening. This work they attended to with regularity, and were of great service.

4. As the Magistrates acted according to the District Magistrate's instruction, that their ambition should be to prevent rather than to punish crime, there were not many cases taken to their file under the Municipal and Town Nuisance Acts.

5. The Sub-Magistrate, Kumbakonam firka, has reported that about 1,30,000 people during the period visited the Swamimalai temple, that the local police made the necessary arrangements for their convenience and that some special police force would be necessary during the next Mahamakham festival. I would also suggest that a similar police force would be necessary even at Tiruvadamarudur during the next festival as a large crowd of people went to the temple there. He has further reported that prompt steps were taken by him to disperse a cattle fair held at Sarukkai and that he had also to disperse one which was going to be held at Perumalkoil and that steps have been taken to prosecute about a dozen persons responsible for it.

6. The low percentage of grave crimes may be attributed to the vigilance of the Railway Police and also of the local Police in watching the K. Ds. of other districts and arresting some of the leading men of such gangs sufficiently early under sections 54 and 523 of the Criminal Procedure Code and eventually charging them under the security chapter.

7. The work done by all the Sub-Magistrates may be regarded as satisfactory.

SUB-ENCLOSURES.

Statistics of cases tried by the Special Sub-Magistrates during the Mahamakham festival of 1909.

Sub-Magistrate.	Number of cases.					
	Under the Municipal Act.	Under the Nuisance Act.	Under the Penal Code.	Total.	Disposed of.	Pending.
1	2	3	4	5	6	7
Stationary Sub-Magistrate, Kumbakonam (Ward No. 1).	36	158	33	227	207	*20
Sub-Magistrate of Kudavasal (Ward No. 2).	..	..	1	1	1	..
Sub-Magistrate of Arantangi (Ward No. 3).	..	..	..	..	..	..
Sub-Magistrate of Mannargudi (Ward No. 4).	..	..	..	..	..	..
Sub-Magistrate of Tiruvadi (Ward No. 5).	..	..	..	..	..	..
Sub-Magistrate of Vedaranniyam (Ward No. 6).	..	..	..	..	..	..
Sub-Magistrate of Tiruvadamarudur (Ward No. 7).	..	3	..	3	3	..
Total ..	36	161	34	231	211	20

* Under the Indian Penal Code.

Statement showing the jurisdiction of the Sub-Magistrates deputed for the Mahamakham festival.

No.	Jurisdiction.	Name of Magistrate.	Designation.
1	Ward No. I	M. R. Ry. C. P. Raghavachari ..	Stationary Sub-Magistrate, Kumbakonam.
2	" II ..	M. R. Ry. S. Venkata Rao ..	Acting Sub-Magistrate, Kudavasal.
3	" III ..	M. R. Ry. T. S. Muthuswami Aiyar	Acting Sub-Magistrate, Arantangi.
4	" IV ..	M. R. Ry. E. Singaravelu Mudaliyar.	Acting Sub-Magistrate, Mannargudi.
5	" V ..	M. R. Ry. M. Sabhapathi Mudaliyar.	Sub-Magistrate, Tiruvadi.
6	" VI ..	M. R. Ry. C. R. Venkatarangiah Nayudu.	Acting Sub-Magistrate, Vedaranniyam.
7	" VII ..	M. R. Ry. G. S. Vaidyanatha Aiyar	Acting Sub-Magistrate, Tiruvadamarudur.

No. R. C. No. 7-A.C., dated the 27th March 1909.

From—D. R. Matheson, Esq., M.A., I.C.S., Assistant Collector of Tanjore,

To—The Collector of Tanjore.

With reference to your R. C. No. 769-G., and B. of 1908, dated 8th March 1909, I have the honour to submit herewith a tabular statement showing the number of cases disposed of by me in connection with the festival. They are all cases of breach of the plague regulations. In addition, I took on file 14 cases. These, however, had no particular connection with the festival and most of them relate to offences committed before the commencement of the festival and all would probably have arisen even if there had been no festival. In fact one may say that there were no ordinary first class magistrerial cases arising out of the festival.

2. With regard to point 2 mentioned in your letter under reference, I have the honour to state that, in accordance with the circular, ten inspection stations were fixed on the main roads leading into Kumbakonam. The sites were selected by the Local Fund Department in consultation with the Civil Apothecary. In some cases, there was difficulty in finding a site for the sheds. But this difficulty was overcome in all cases except No. 10 at the junction of the Madras and College roads. Here there was no site available. Eventually a shop was obtained on a rent of Rs. 25, which commanded a view of both roads and in it the hospital assistant and the guard were stationed. There was also some difficulty with regard to labour and material owing to the large amount of similar work being done in and around Kumbakonam. However, by means of working both day and night for the last three days, the sheds were completed by the 15th February, the date from which the special regulations in connection with the festival took effect. The staff at each of the stations consisted of a hospital assistant, a compounder, a lascar, two toties and four constables. The accommodation at each of the stations is detailed at the foot of the accompanying sketch which shows the position of the several stations. In the case of No.10, where there was no cholera shed, arrangements were made to convey any patient to the hospital. Fortunately, there were, as far as I know, no cases and the hospital sheds were never used. The staff at the inspection sheds were asked to make an enumeration of people coming in by road to Kumbakonam. A table is appended giving the particulars for each station from 1st March 1909 to 6th March 1909, both days inclusive. These figures can only be approximate. The total number, as given, is 587,780. Of these 473,824 came in on the 5th and 6th. Few, if any, of these who came in on the 5th would leave until they have bathed on the 6th. Of those who came in from the 1st to the 4th, it is probable, I should think, that at least 80 per cent. may have returned to their villages. Taking one-fifth as remaining in the town for the 6th, the total for that day comes to 495,315 or nearly half a million.

Sub-Enclosures.

Statement showing the number of people that arrived by all the ten outer stations at Kumbakonam from 1st to 6th March 1909.

Name of station.	1st March 1909.	2nd March 1909.	3rd March 1909.	4th March 1909.	5th March 1909.	6th March 1909.	Total.
Asur	989	629	1,981	6,060	21,219	5,664	36,512
Swamimalai ..	2,283	1,822	2,213	6,495	37,649	17,048	67,510
Shacottai	7,200	3,757	6,150	15,150	102,500	10,000	144,757
Tirunageswaram ..	277	249	461	2,218	13,550	3,011	19,766
Inambur	1,369	868	1,605	3,193	10,523	6,535	24,093
Ammachatram ..	1,502	807	2,529	3,767	50,410	8,594	67,609
Mangudi	3,604	1,108	1,820	3,450	25,100	19,690	54,772
Kuppangulam ..	463	275	446	637	2,787	8,294	12,902
Toll-gate	2,416	2,347	4,365	9,696	60,575	27,467	106,866
Pattiswaram ..	3,000	1,880	1,987	2,898	31,988	11,220	52,973
Total ..	..	..	..	..	..	..	587,760

Statement showing the number and nature of cases tried in connection with the Mahamakham festival at Kumbakonam during 1909.

Number of cases received.	Number actually convicted.	Number acquitted.	Number in which further proceedings were stopped under section 249, Civil Procedure Code.	Number recommended for withdrawal.	Number in which orders are solicited.	Remarks.
1	2	3	4	5	6	7
52	13	3	7	5	24	Out of 24 in column 6, no summonses could be issued in 6 cases as no definite address in Kumbakonam was given. In the case of the remaining 18, the summonses issued are returned with the endorsement that the persons referred to have left Kumbakonam and gone elsewhere. The permanent addresses of the persons are given in the complaints. All these cases except one were cases of disobedience to the Government notification prohibiting persons from coming to Kumbakonam from plague-infected parts of the country. The exceptional case was one where the accused, in addition, evaded observation.

CIRCULAR.

R.C. No. 769-G. & B., dated 5th December 1908.

MAHAMAKHAM FESTIVAL, 1909.

The Mahamakham festival commences on the 25th February 1909 and the programme of the festival observed in the several temples in the town is contained in Appendix A.

2. The arrangements in and outside the town of Kumbakonam will be classified under the following major heads :—

I. Sanitary	(*a*) Water-supply. (*b*) Conservancy. (*c*) Accommodation. (*d*) Medical.
II. Police and Magisterial	(*a*) Police. (*b*) Magisterial. (*c*) Traffic.
III. Railway.	
IV. Miscellaneous,	

3. The arrangements will be confined to the undermentioned two areas :—

A.—Inner circle (comprising the town of Kumbakonam within municipal limits).

B.—Outer circle (comprising the inspection stations).

A.—INNER CIRCLE.

I. Sanitary Arrangements.

(*a*) *Water-supply.*

4. Rules regarding the regulation of water-supply are contained in Appendix B. Arrangements will be made to keep the Arasalar river dry throughout the festival and tube wells will be sunk in the bed. The river Cauvery will also probably be without water, except on the 9th and 10th days of the festival. Every endeavour should be made to warn the public of the danger of drinking river water, should it be running during the festival. Notices to this effect will be circulated and posted in conspicuous places in the town. Norton's tube wells will be sunk on the river Padugai at convenient intervals. Special ponds will be reserved for the use of cattle; the wells and ponds noted in Appendix C will be closed and fenced and watchmen posted to prevent their being used. Notices specifying what wells, tanks, etc., have been reserved or closed will be affixed in conspicuous places, throughout the town. No water shall be removed for any purpose from tanks reserved for cattle. All tanks likely to be used for *bathing* will be disinfected with chloride of lime (liquor) two or three days before the commencement of the festival and, at intervals, thereafter as may be found expedient.

5. In accordance with the instructions of the Sanitary Commissioner, a few of the most popular public drinking wells will be fenced off during the festival and provided with three Brahman well-drawers each. Arrangements will be made to supply as much of the town as possible with water from a central boring by means of pipes and hydrants. The Mahamakham tank will be disinfected every night with chloride of lime (liquor), the process of disinfection being commenced a few days before the festival. The erection of water-pandals will not be undertaken by the Municipality, but will be left to private charity.

(*b*) *Conservancy.*

6. The local Civil Apothecary (Mr. Wright) will be in charge of the sanitary arrangements of the town, subject to the instructions of the Sanitary Commissioner. The Municipal Chairman will be requested to depute one or more councillors resident in or near each ward to see that the sanitary arrangements are carried out strictly but without avoidable harshness.

7. The chief Sanitary Inspector will be responsible for seeing that the instructions of the Sanitary Commissioner are carried out throughout the Municipality, and will be assisted by two mounted orderlies. For each ward there will be a Sanitary Inspector. The seven wards in the town will be divided into seventeen sections as follows :—

		Sections.
Ward No.	I	3
Do.	II	3
Do.	III	2
Do.	IV	2
Do.	V	2
Do.	VI	3
Do.	VII	2
	Total	17

8. The conservancy of each section will be in immediate charge of a maistri working under the Sanitary Inspector of the ward. Each maistri will have two peons working under him. Three rubbish carts and five sweepers will be attached to each section. The staff engaged by the Municipality for purposes of conservancy will consist of—

(*a*) 3 sanitary inspectors.
(*b*) 17 maistries.
(*c*) 34 peons.
(*d*) 2 mounted orderlies.
(*e*) 85 sweepers.
(*f*) 100 street toties.

These numbers are exclusive of the regular municipal staff, who will have their own work to do.

9. There will also be—

(*a*) 51 rubbish carts.
(*b*) 60 latrines (40 within the town and 20 in the open country).
(*c*) 10 latrine carts.

These numbers are in addition to those ordinarily in use. The floor of each latrine will be covered with 8″ of sand. A toty will be attached to each latrine and will be required to clean the floor, whenever the latrine is used. This will gradually reduce the depth of sand on the floor. A substantial heap of sand must therefore be stacked by the side of each latrine. Each latrine will also be provided with a tub, which must be always kept full of water.

10. The Chairman will be requested to frame, in consultation with the District Medical and Sanitary Officer and subject to the final approval of the Sanitary Commissioner, a set of subsidiary rules for the guidance of the conservancy staff.

11. A notice will be issued by the District Magistrate, under section 144, C. P. C., requiring all owners and occupiers of houses and buildings occupied, or intended to be occupied as dwelling houses within the Municipality, to whitewash their houses, to clear their backyards of all rank and noxious vegetation and to keep their premises neat and clean in all respects.

(*c*) *Accommodation.*

12. About 20 temporary sheds to accommodate (say) 250 people each, so as, as far as possible, to accommodate different castes separately, will be provided at convenient places in the town, selected by the Municipal Chairman, in consultation with the Civil Apothecary. The Tahsildar will be responsible for having materials ready to erect more sheds giving as much accommodation again, in case people show a disposition to use the sheds already put up.

(d) Medical.

13. In addition to the hospital and its dispensary, five temporary dispensaries, with staff, appliances, etc., will be erected at different parts of the town. A cholera hospital with 24 beds will also be opened and equipped with the requisite staff and medicines. The Tahsildar will be responsible for having materials in readiness to double the cholera accommodation in case of emergency. Five stretchers and 10 stretcher bearers have been provided for. The South Indian Railway authorities are arranging for the examination and removal from the train at Mayavaram and Tanjore of any person found to be suffering from cholera or any other infectious or contagious disease. Detailed instructions will be issued in this matter, in consultation with the Agent of the South Indian Railway and the District Medical and Sanitary Officer. The District Medical and Sanitary Officer will be requested to issue a set of rules for the guidance of the subordinate staff. The Local Civil Apothecary will be in immediate charge of the medical arrangements in the inner circle, under the supervision of the District Medical and Sanitary Officer.

II. Police and Magisterial.

(a) Police and (c) Traffic.

14. The Deputy Inspector-General of Police, Southern Range, and the District Superintendent of Police, Tanjore, will be requested to arrange to be present at Kumbakonam during the festival, as on the last occasion. Special arrangements will be made on the northern and western ghauts of the Mahamakham, and Pottamarai tanks and at the approach at the north-western corner of the tank, so as to minimise danger to life and safety. A boat will be provided on the Mahamakham tank itself. Arrangements will be made with regard to the bathing in the Cauvery, with the object of preventing water used for bathing from being used for drinking. No water can be taken from either river, except on passes.

15. Arrangements will be made by the District Superintendent of Police for the temporary detention and feeding of children, whose parents or guardians cannot be found. There will be a central lost and unlcaimed property office at the Principal Police Station, Kumbakonam, during the festival. All Magistrates will remand lost or unclaimed property that may be sent to them to the Magistrate holding office at the Principal Station.

(b) Magisterial.

16. As on the previous occasion, six Second-class Magistrates and one First-class Magistrate will be drafted to Kumbakonam. Separate rules will be issued prescribing their distribution and duties. Each of the six Second-class Magistrates and the Stationary Sub-Magistrate of Kumbakonam will be given jurisdiction over a ward for sanitary purposes, both morning and evening, without prejudice to their duties as Courts, which should ordinarily be confined to the period between 11 A.M. and 4 P.M., each working day. Their ambition should be to *prevent* rather than to *punish* crime. All Magistrates will have concurrent jurisdiction throughout the whole taluk of Kumbakonam and will be invested with powers accordingly by the District Magistrate, but each of the seven Second-class Magistrates mentioned above will be in charge of a ward, the Firka Sub-Magistrate being responsible for all work outside the town *throughout the taluk.*

III. Railway.

17. The Agent of the South Indian Railway is deputing the Chief Medical Officer to be present at Kumbakonam throughout the festival and is providing an adequate supply of waiting rooms and latrines for the use of passengers. Six temporary booking offices are being provided within the station yard, for the convenience of pilgrims on their return journey. The Company is arranging to have sub-ways on the eastern and western sides of the station. The station building has also been extended and remodelled.

IV. Miscellneous.

18. One hundred temporary lanterns will be put up, in addition to the existing number. All lights in the town will be kept burning all night throughout the festival and for 10 days before and after that period (one month in all), except on

nights when there is *bright* moon-light. The Municipality will arrange to provide suitable badges to distinguish each grade of the Executive, Sanitary and Conservancy staff and will also provide sign-boards to mark off the several dispensaries, camps, latrines, etc.

B.—OUTER CIRCLE.

I. Sanitary.

19. At the suggestion of the Sanitary Commissioner, arrangements are being made by the President of the District Board for the establishment of ten inspection stations at suitable points on each of the principal roads leading to the town, in view to the examination of pilgrims coming by road and to the detention of persons suspected of plague, cholera or any other seriously contagious or infectious disease. Each inspection station will be in charge of a Hospital Assistant. A compounder, a lascar and two toties will also be attached to each station. Four constables will be on duty at each station, under the direct orders of the Hospital Assistant in charge of the station.

20. Small cholera sheds will also be attached to each inspection station, and sick people detained therein will be attended to by the Hospital Assistant on duty. These arrangements will commence ten days before the festival and will last for ten days after its conclusion, *i.e.*, one month in all.

II. Magisterial.

21. All Magistrates specially deputed for festival duty will have concurrent jurisdiction throughout the *taluk* as well as the *town*; but, in practice, it will be primarily the duty of the special First-class Magistrate and the Firka Sub-Magistrate to try cases from outside the town.

22. The Tahsildar of Kumbakonam will keep an eye on the inspection camp from time to time and submit suggestions, when necessary, to the Divisional Officer and the Collector.

J. P. BEDFORD,

Collector.

Appendix B.

Notice Under Section 144, Criminal Procedure Code.

Whereas a large concourse of people is expected to assemble at Kumbakonam during the approaching Mahamakham festival and whereas cholera is likely to prevail in and about the town and whereas danger to human life, health and safety is likely to occur unless special precautions are taken, the District Magistrate is pleased to issue the following order which will be in force from the 15th February 1909 to the 15th March 1909 :—

(1) The bed of the Cauvery within Municipal limits will be reserved for bathing purposes. The public are prohibited from taking away the water for any purpose, except as specified below, washing clothes or committing any other nuisance therein. This prohibition does not, however, apply to the removal of water for purposes of *abhishegam* in temples, which will be allowed on the person or persons wishing to remove the water producing a written permission from the Chairman of the Municipality.

(2) Cattle are not to be allowed into the river west of the Cauvery bridge. They will not be prohibited from entering east of the bridge. Special ponds within Municipal limits have been selected and notified in which cattle can drink and bathe.

(3) Any person disobeying these orders will be liable to be punished under section 188, Indian Penal Code.

Given under my hand and the seal of this Court this 28th day of January 1909.

Tanjore Dt. Magte's Office, *28th January 1909.*

J. P. BEDFORD,
District Magistrate.

Appendix C.

List of tanks reserved for bathing only.

1. Pachaiappa tank.
2. Pottamarai tank.
3. Varaha tank.
4. Redy Row's tank.
5. Velangakaran tank.
6. Thaikkal tank.
7. Kothan tank.
8. Chandra Pushkarani.
9. Surya Pushkarani.
10. Pushkarani behind Gowthamesvaran temple.
11. Pidari tank.
12. Mahamakham tank.
13. Chetty Kulam.
14. Kokat Row tank.
15. Sekkulam.
16. Tamarai Kulam.
17. Kannan tank.
18. Travellers' Bungalow tank.
19. Kalyanaraman tank.
20. College tank.
21. Papa tank.
22. Mariyamman tank.

List of wells reserved for drinking only.

1. Jail Road well.
2. Banadurai North Street well.
3. Banadurai East Street 2 wells.
4. Banadurai South Street well.
5. Bakthapuri ghaut well.
6. Pillaiyar Koil Street well.
7. Dabir West Street well.
8. Karnakkollai East Street well.
9. Chackrapani East Street well.
10. Solaippa Street well.
11. Pettai North Street western well.
12. Malluga Jetty Street well.
13. Pettai Bhakiyanatha Street well.
14. Chetti Pudu Street well.
15. Thovarankurichi North Street well.
16. Kumbhesvaran South Vadamboki well.
17. Fish and Meat market well in Nagesvaran South Street.
18. Nagesvaran Sannadhi well.
19. Kadalangudi West Street well.
20. Edai Street well.
21. Kaduvetty Street well.
22. Mummoorthi Vinayagar Sannadhi well.
23. Pichai Brahmin Street well in front of No. 10 house.
24. Tirunagesvaram Road well.
25. Church Road well.
26. Chunnambukara Street well.
27. Vaddi Pillaiyar Koil Street well.
28. Kasivisvanathan Sannadhi well.
29. Elukadal Street well.
30. Karuppur Palaya Street well.
31. College Road well.
32. Thuluka North Street well.
33. Mudali Street well.
34. Eraharam Valinadappu well.
35. Sarangapani North Street well.

List of private wells reserved for drinking only (in public places).

1. Banadurai new Road well.
2. Dabir ghaut well.
3. Chackrapani South Street well.
4. Krishna Row Agraharam bathing ghaut well.
5. Pettai North Street Amman Koil well.
6. Pettai Nanayakara Street well (east end).
7. Vijendraswami Madam Street well.
8. Palayaranmanai Street Kaliamman Koil well.
9. Puduppalaya Street east end well.
10. Amman Koil South Street well.
11. Ramaswami Koil East Madavilagam well.
12. Kuchikatti lane well.
13. Jaganatha Pillaiyar Koil West Street well.
14. Eruthukara Street well.
15. Jaganatha Pillaiyar Koil east end Norton's tube well.
16. Nachaiyar Koil Valinadappu Street well.
17. Aranmanai Krishna Chettiar's well in Tirunagesvaram Road.
18. Thirunarayanachery Salai well in front of the manatpam.
19. Well behind the choultry of Subbarayalu Naick in Tirunarayanachery Salai.
20. Perumpandy West Street well.
21. Melacauvery North Street well.
22. Pallivasal Street well.
23. Varadarajaperumal Koil well.
24. Sarvamanya Thattara Street well.
25. Sarvamanya Agraharam well.
26. Mooppakoil Kavarai Street well.
27. Krishnan Koil Sannadhi well.
28. Kodisvaran Sannadhi well.
29. Kandasami Pathan's well in Swamimalai Road.

List of tanks reserved for cattle.

1. Cattle may be allowed to bathe and drink in Banandurai tank.
2. The Travellers' bungalow tank: in one ghaut cattle may be allowed to quench their thirst.

List of tanks absolutely closed.

1. East Kottaiyur tank.
2. West Kottaiyur tank.
3. Tanks lying east of Perumpandy South Street, Perumpandy Kosavan huts and east of Pathukattu Street.
4. The tank near Chetty Padithorai.

List of wells absolutely closed.

1. The well at the east end of Pudupalaya Street.
2. The well at east end of Dabir Middle Street.
3. The western well in Chackrapani North Madavilagam.
4. The private well in Kajiyar Street on the southern side of the road close to the burial ground.

J. P. BEDFORD,

District Magistrate.

Notice under section 144, Criminal Procedure Code.

Whereas a large concourse of people is expected to assemble in the town of Kumbakonam for the approaching Mahamakham festival and whereas danger to human life, health or safety is likely to occur unless special precautions and care are taken to keep the town in a clean and sanitary condition, the following orders are issued under section 144, Criminal Procedure Code, and they will be in force for two months from this date :—

All owners and occupiers of houses and buildings occupied or intended to be occupied by men or cattle within the limits of the Kumbakonam Municipality shall within a fortnight from the date of issue of this order—

(1) whitewash their houses and buildings both inside and outside,

(2) clear their backyards of all rank and noxious growth,

(3) keep their premises and backyards and the surroundings thereof free from dirt or other offensive matter of any kind; and

(4) keep all wells in their backyards fenced and the water thereof uncontaminated.

Any person infringing or disobeying these orders shall be liable to punishment under section 188, Indian Penal Code.

TANJORE DT. MAGISTRATE'S OFFICE;
30th January 1909.

J. P. BEDFORD,

District Magistrate.

Police arrangements for Mahamakham festival, 1909.

The Police must maintain a careful watch that the sanitary arrangements are carried out and if not, report the matter to the Sanitary Inspector. The Police must forbid the performance of the offices of nature at any place not set aside for such purpose.

2. The Police must report at once to a medical officer any case of cholera, small-pox or any other serious disease.

3. It must be remembered by the patrols that they must interfere as little as possible with the people, their chief duty being to prevent crimes, offences, and nuisances, preserve the peace and keep order and to spot known depredators and bad characters.

4. People should be warned not to drink the river-water. No water will be allowed to be removed for any purpose from tanks reserved for cattle or from the Cauvery river except on passes which will be issued for the purpose.

5. *Temples.*—To keep order generally and to escort the processions. Only half the men are to do the escort duty. The Police must prevent nuisances and crimes. *Inspectors* to see that no one is injured by the car-wheels, etc. The Inspectors will arrange for the ingress and egress of the pilgrims as per notices issued by the Deputy Magistrate.

6. *Cart stands.*—To see they are kept clean by the servants appointed for the said purpose, and to assist them as much as possible in every way.

7. The Police must remember that they must give as little trouble as possible to the pilgrims ; they must be as courteous as possible : a help and not a nuisance to them.

8. Lost children should be sent to the principal station, where they will be taken care of and fed by the Police till they are claimed by their parents. Funds will be given to them for the purpose by the Magistrate. All persons in search of their children should be directed to go to the principal station. Every constable on duty at Kumbakonam during the festival will be furnished with a copy of the rules.

9. Inspectors are held responsible for all duty within their limits and must heartily co-operate with the Magistrates and Sanitary officers. They must be constantly on the move inspecting.

10. *Records.*—At the temporary stations, only the following records will be kept :—

(*a*) Duty roster.
(*b*) First information reports.
(*c*) Petty registers.
(*d*) Bail bonds.
(*e*) Witness recognizances.
(*f*) Case diary.
(*g*) Arrest reports.
(*h*) Charge sheets.
(*i*) Prisoners' search registers.

11. In cases of cape-maries and other wandering thieves, their finger prints should be taken. Rollers, tin-slabs and forms will be supplied to each station.

12. Beggars must be discouraged from entering the town.

13. People should be made to go to and return from the river by the roads set apart for the purpose.

14. The men will work in two shifts and be on duty from 7 A.M. to 1 P.M., 1 P.M. to 7 P.M.; 7 P.M. to 1 A.M. and 1 A.M. to 7 A.M. Constables will always be deputed in couples.

15. The road from Papanasam to Velangiman should be patrolled.

16. The Inspector of Papanasam will encamp at Swamimalai and supervise all work in his division.

17. The Inspector of Tiruvadamarudur will remain at his head-quarters and supervise work.

TANJORE ;
16th December 1908.

F. B. M. CARDOZO,
Superintendent of Police.

Nature of duty.	Inspector.	Head Constables.	Constables.	———
Melakaveri Station.				
General duty	1	1	2	(*a*) The men will be posted from the Melakaveri station to the Bridge and will work 10 on each bank of the river and will prevent nuisances from being committed on the banks or in the river-bed and will not allow water to be taken except on passes which will be issued.
Four beats	..	2	16	
Cauvery river	..	5	(*a*) 40	
Chattrams	..	..	(*b*) 8	(*b*) Kottaiyur chattram .. H.C. .. C. 4; Perumpandi chattram .. 4
Sentry	..	..	2	
Total ..	1	8	68	Total 8

Nature of duty.	Inspector.	Head Constables.	Constables.
Pettai Station.			
General duty	1	1	2
Sentry	..	..	2
Ten beats	..	2	40
Temples Visvanathaswami koil ..	..	..	4
Chattrams	..	1	(c) 20
Total ..	1	4	68
Principal Station.			
General duty	1	2	3
Sentry	..	..	2
Eighteen beats	..	4	72
Temples	..	3	(d) 42
Cart-stands	..	..	(e) 8
Sub-Jail and Treasury guard ..	..	1	7
Total ..	1	10	134
Mahamakhakulam Station.			
General duty	1	1	2
Sentry	..	..	2
Twelve beats	..	4	48
Temples	..	2	(f) 24
Chattrams (Mahamakhakulam chattram).	..	..	4
Total ..	1	7	80
Mela Aiyan Street Station.			
General duty	1	1	2
Sentry	..	..	2
Four beats	..	2	16
Chattrams	..	1	(g) 12
Temple (Chakrapaniswami koil) ..	..	1	6
Total ..	1	5	38

	H.C.	C.
(c) Mownaswami matam ..		4
Byraghi chattram ..		4
Darasuram chattram ..		8
Chetty chattram ..		
Head constable to supervise.	1	..
Total ..	1	20

	H.C.	C.
(d) Kumbheswaraswami koil	2	16
Sarangapaniswami koil	1	10
Ramaswami temple		4
Sadaperumal temple ..		4
Manavalamamuni temple. ..		4
Someswaraswami temple. ..		4
Total ..	3	42

	H.C.	C.
(e) Sockampalayam cart-stand. ..		4
Kumbheswaraswami cart-stand. ..		4
Total		8

	H.C.	C.
(f) Kasivisvanathan koil	1	6
Agasthiswaraswami koil.	2	6
Gantemeswaraswami koil. ..		4
Nageswaraswami koil ..		4
Kali koil		4
Total ..	3	24

	H.C.	C.
(g) Srinivasa Pillai chattram. ..		4
Chidambara Chetti chattram. ..		4
Ramalinga Chetti chattram. ..		4
Head constable to supervise.	1	..
Total ..	1	12

Nature of duty.	Inspector.	Head Constables.	Constables.
Bagavatha Padithorai Station.			
General duty	1	1	2
Sentry	..	..	2
Ten beats	..	4	40
Two temples	..	..	(*h*) 8
Four chattrams	..	1	(*i*) 16
Cauvery bridge	..	2	(*j*) 16
Total ..	1	8	84
Arasalar Station.			
General duty	1	1	2
Sentry	..	..	2
Five beats	..	2	20
Two temples	..	..	(*k*) 8
Arasalar river	..	2	20
Total ..	1	5	52

(*h*) Kalastriswami koil 4
Banadurai koil 4
Total 8

(*i*) Venkatarayar choultry .. 4
Tiruppanandal choultry. .. 4
Gundapparayar choultry. .. 4
Kaliyanaramier's chattram. .. 4
Head constable to supervise. 1 ..
Total .. 1 16

(*j*) There will be 4 posts at the bridge, 2 on each side and 2 men will be on duty at each post with one head constable to supervise. They will regulate the traffic at the bridge.

(*k*) Brahma koil 4
Varadarajaperumal koil. .. 4
Total 8

TANJORE,
16th December 1908.

F. B. M. CARDOZO,
Superintendent of Police.

Special duties.

Nature of duty.	Inspectors.	Head Constables.	Constables.
(1) Out-posts 10	1	5	40
(2) Fire-Brigades 4	..	4	48
(3) Orderlies	..	..	24
(4) Mahamakham tank	1	10	76
(5) Pottamarai tank	..	3	20
(6) Camp guards	..	4	32
(7) Reserve force	1	27	286

(1) *Out-posts.*

Ten inspection stations will be established by the President, District Board, Tanjore, at suitable points at each of the principal roads leading to the town in view to the examination of pilgrims coming by road and to the detention of persons suspected of plague, cholera or any other seriously contagious or infectious disease. Four constables will be on duty at each station under the direct orders of the Hospital Assistant in charge of the station. They will be supervised by one Inspector, one Sub-Inspector and four head constables.

(2) *Fire-brigades.*

Four brigades will be situated, 1 at each of the four police camps, and 1 head constable and 12 constables will be on duty at each Brigade.

(3) *Orderlies.*

Two orderlies will be furnished to each of the 8 Sub-Magistrates including Firka and Town Sub-Magistrates and 4 to each of the Divisional Magistrates—the special first class Magistrate and the Joint Magistrate.

The Trichinopoly District Police will furnish the orderlies.

(4) *The Mahamakham tank.*

A special force consisting of 1 Inspector, 10 head constables and 76 constables will be on duty at the tank.

The tank will be barricaded on all sides and special passages opened for ingress and egress at the four corners of the tank. A head constable will be posted at each corner with 6 constables— 4 on the outside road and 2 inside—and they will see that bathers get in and get out only by the passages set apart for the purpose. Three constables will be on duty on the steps on each side of the tank and two constables will be in the boat which will be placed in the tank.

The Inspector will be at the tank and supervise the whole arrangements.

The Trichinopoly District Police will furnish the men for this duty.

(5) *Pottamarai tank.*

A party of 3 head constables, 1 of whom will be a Sub-Inspector, and 20 constables will be on duty at the tank. They should see that the ingress into and egress from the tank is effected by the passages set apart for the purpose.

(6) *Reserve force.*

The Inspector in charge will also supervise the Police camps and Fire-Brigades.

TANJORE,
16th December 1908.

F. B. M. CARDOZO,
Superintendent of Police.

MADRAS POLICE.

Constable No. Name District Camp No. Section (A or B).

1. The police must maintain a careful watch that the sanitary arrangements are carried out and if not, report the matter to the Sanitary Inspector. The police must forbid the performance of the offices of nature at any place not set aside for such purpose.

2. The Police must at once report to a medical officer any case of cholera, small-pox or any other serious disease.

3. It must be remembered by the partols that they must interfere as little as possible with the people, their chief duty being to prevent crimes, offences and nuisances, preserve the peace and keep order and to spot known depredators and bad characters.

4. People should be warned not to drink the river water. No water will be allowed to be removed for any purpose from tanks reserved for cattle or from the Cauvery river except on passes which will be issued for the purpose.

5 *Temples.*—Police must prevent nuisance and crimes.

6. *Cart stands.*—To see they are kept clean by the servants appointed for the purpose and to assist them as much as possible in every way.

7. The police must remember that they must give as little trouble as possible to the pilgrims; they must be as courteous as possible; a help and not a nuisance to them.

8. Lost children should be sent to the principal station where they will be taken care of and fed by the Police till they are claimed by their parents. All persons in search of children should be directed to go to the principal station.

9. Beggars must be discouraged from entering the town.

10. People must be made to go to and return from the river by the roads set apart for the purpose.

II. Hours of duty:—

A section from 7 A.M. to 1 P.M.
B " from 1 P.M. to 7 P.M.
A " from 7 P.M. to 1 A.M.
B " from 1 A.M. to 7 A.M.

5. The Superintendent of the Broad Gauge district will be asked to mobilize the men he is sending at Kumbakonam on the 23rd February. These men immediately on arrival will be brought into the duty rosters ordered in paragraph 4 and will work as far as possible directly under the head constables coming from the Broad Gauge.

6. Inspector in charge will see that there are not more than 10 men under one head constable.

7. The parties detailed to perform duties in accordance with items (1) to (5) (paragraph 2 *supra*) should not be kept on duty for periods exceeding six hours at a stretch.

8. The Railway authorities are furnishing accommodation for the men who will be employed at Kumbakonam Railway Station and Inspector will see that all men so employed reside in the accommodation furnished, and absence therefrom, without special leave, will merit punishment.

9. All Inspectors sending men for festival duty will read and explain to their men Police Order No. 628, which prohibits men detailed for festival duty bringing their families with them.

10. The whole party of head constables and constables, who will be deputed on special duty at Kumbakonam town, will be fed at the cost of the State. The daily allowance admissible under the Civil Service Regulations will be reduced by three-fourths.

11. Inspector must bear in mind that he keeps all his men under his immediate supervision. Those men performing duties under items (6) and (8) (paragraph 2 *supra*) must be directly supervised by sub. *pro tem.* Inspector M. R. Ry. Subrahmania Aiyar.

TRICHINOPOLY;
The 24th December 1908.

N. E. Q. MAINWARING,
Superintendent of Government Railway Police.

Rules for the Guidance of the Sanitary and Medical staff during the Mahamakham festival.

The Civil Apothecary will be in charge of the whole sanitary staff which will work directly under the Chief Sanitary Inspector.

2. He will daily inspect the temporary hospitals established in the town and the cholera hospital, pilgrim sheds and, if necessary, plague shed.

3. He will also, as far as possible, inspect the various blocks and see that the work is being done properly by the staff concerned.

4. All derelictions of duty by the staff under him will be noted and brought to notice.

Chief Sanitary Inspector.

1. The Chief Sanitary Inspector shall be in direct communication with the Municipal Secretary, the Police and the Medical officer (*viz.*, the Civil Apothecary) and will be responsible for the working of the whole sanitary staff.

2. All orders to Ward Sanitary Inspector shall be in writing, a copy of the same being kept in a duplicate order book.

3. He shall visit the pilgrims' shed daily, choultries, hotels or public places as frequently as possible, and bring to notice any overcrowding in hotels and eating-houses.

4. He shall visit the spot as soon as he receives intimation of an outbreak of chlolera or plague and see that the rules prescribed in respect of these are correctly adopted.

5. He shall see that disinfecting materials, stretchers for the conveyance of the sick and other articles of plant and equipment are kept in good order and in readiness for use.

6. He must constantly and vigilantly supervise the working of the Ward Inspectors, Block maistries and of the menials and see that the rules for the latter's guidance are strictly followed, and any dereliction of duty should be reported at once by the Inspectors concerned to the Chief Sanitary Inspector.

7. The Ward Inspectors shall keep a daily diary of work done for the information of the Chief Sanitary Inspector, the Municipal Secretary and the Civil Apothecary and shall submit it together with the diaries of the Block Inspectors.

8. The Chief Sanitary Inspector will send an extract of his work on the following morning.

III.—Ward Inspector.

1. He shall muster the whole staff daily, assign definite duties to each menial and fix the hours of work and relief. A muster roll shall be maintained.

2. He shall see that the arrangements for the disposal of rubbish, fœcal matter, etc., are regularly and effectively carried out, that tanks and wells, reserved for drinking, are protected from pollution and that the marks indicating pilgrims' sheds, cholera and plague camps, tanks, latrines, etc., are correctly maintained. The Ward Inspector shall personally attend to the Hankinizing of wells, etc.

3. He shall constantly patrol his ward and see that the watchmen, toties, sweepers, cart drivers and maistries of blocks are doing their work.

4. He shall be on the watch for the occurrence of cholera or other epidemic disease and shall cause prompt notice to be conveyed to the nearest Hospital Assistant of any suspicious case.

5. If a case of cholera or plague occurs, he shall at once take the necessary steps for removing the sick to the hospital concerned with a brief note of the case to the Chief Sanitary Inspector, Municipal Secretary and Civil Apothecary and shall also lose no time in attending to disinfection of infected places, etc., connected with it.

6. He shall keep in readiness carbolised saw-dust in portable tins under the charge of maistries and peons. Bottles of corrosive sublimate lotion should not be entrusted to anybody else. They must be with him only and the bottles should bear on them the printed labels " Poison " both in English and Tamil.

7. If any unwholesome food or drink sold or exposed for sale comes under his notice, the Police should be instructed to take action under the Indian Penal Code.

8. He shall keep a full daily diary of his proceedings and submit it to the Chief Sanitary Inspector early next morning.

9. He will be immediately subordinate to the Chief Sanitary Inspector, and shall also execute all orders given to him by higher officers. Care should be taken to work in harmony with the Police and with the Hospital Assistants.

IV.—Block Maistries.

1. The maistri shall attend the muster punctually and obey the orders given to him by the Ward Inspector.

2. He shall see to the removal of street refuse, side deposits and fœcal matter in house premises.

3. He shall at once bring to the notice of the Ward Inspector if any cart does not arrive at the work spot and will take all possible measures to get the cart to the work spot and have the work done.

4. He will daily submit a diary to the Ward Inspector of the work done by him and of default or negligence of menials working in his block.

A. J. HESTERLOW,

for *District Medical and Sanitary Officer, Tanjore.*

APPENDIX.

List of the number of trains run from the 27th of February to 13th of March and the approximate number of passengers carried into and out of Kumbakonam on the date shown therein.

Trains to Kumbakonam.

	Passengers.
February 27th, 15 trains 9 at 1,000 + 6 at 300	10,800
February 28th, 20 trains 14 at 1,000 + 6 at 300	15,800
March 1st, 32 trains 26 at 1,000 + 6 at 300	27,800
March 2nd, 37 trains 31 at 1,000 + 6 at 300	32,800
March 3rd, 45 trains 39 at 1,000 + 6 at 300	40,800
March 4th, 45 trains 39 at 1,000 + 6 at 300	40,800
March 5th, 46 trains 40 at 1,000 + 6 at 300	41,800
March 6th, 33 trains 27 at 1,000 + 6 at 300	28,800
Total	239,400

III. Meals will be supplied by contractors at the Police camps from 6 A.M. to 8 A.M., 12 noon to 2 P.M. and 6 P.M. to 8 P. M. daily.

No excuse whatever will be accepted for failure to report for duty at prescribed hours.

IV. In the event of any enquiry being made by pilgrims or others regarding lost children and lost property, the parties should be referred to the Principal Station, where an enquiry office will be found.

V. In the event of fire, the nearest constable will at once proceed to the nearest Police camp and give the alarm.

VI. In the event of an accident, the injured person will be carried at once to the nearest hospital or dispensary. The name of the injured person will be noted and the circumstances of the accident briefly reported and entered in note-book.

VII. Throughout the festival constables will always be in uniform except when off duty at the camps. The camp guard sentries will see that no constable leaves the camp without wearing his uniform. (Exception during hours of meals.)

N.B.—These rules will be printed on sheets of paper in Tamil and a copy given to each constable. The headings will be filled in by the senior officer in charge of the station or out-post to which the constable is deputed for duty.

Duties of constables should on no account whatever be changed. In the event of any constable falling ill or being otherwise unable to perform the duty assigned, his place will be taken by a constable from the Reserve until such time as he is again available for duty.

TANJORE:
16th March 1908.

F. B. M. CARDOZO,
Superintendent of Police.

Rules for the working of the Railway Police during the Mahamakham festival (1909).

Railway Police employed at Kumbakonam will be placed under Inspector M. R. Ry. Balasundara Sastri of G. Division with sub. *pro tem.* Inspector M. R. Ry. Subrahmania Aiyar of F. Division to assist him.

2. Inspector-General has sanctioned the employment of a force of 17 head constables and 146 constables for duty in connection with the festival. This force will be made up by mobilization of Trichinopoly Railway Police district which will give 11 head constables and 99 constables and the balance of 6 head constables and 47 men will be lent by the Broad Gauge district. This force will be utilized in the following manner :—

	Head constables.	Constables.
(1) Passengers' enclosures and booking offices	5	25
(2) Parking vehicles in station yards	1	6
(3) Parcels room		4
(4) Ticket gates and sub-ways		16
(5) Platforms	3	20
(6) Travelling staff	4	20
(7) Reserve	1	20
(8) Out-stations	3	35

3. The actual festival will commence on the 25th of February and continue till the 6th of March 1909. Trichinopoly Railway Police district will mobilize at Kumbakonam on the 21st of February, all men being directed to report themselves to Inspector M. R. Ry. Balasundara Sastri.

4. Inspector M. R. Ry. Balasundara Sastri will draw up duty rosters detailing the men to the duties described in paragraph 2, being particular to post the men of Trichinopoly district to perform the duties detailed in item (8) (out-stations).

Names of out-stations where men are to be posted.	Head constables.	Constables.
(1) Kuttalam	..	4
(2) Narasingampet	..	4
(3) Aduturai	..	2
(4) Tiruvadamarudur	1	5
(5) Darasaram	1	5
(6) Sundaraperumalkoil	1	5
(7) Papanasam	..	4
(8) Pandaravadai	..	2
(9) Aiyampet	..	2
(10) Titte	..	2

Trains from Kumbakonam.	Passengers.
March 6th, 35 trains 29 at 1,000 + 6 at 300	30,800
March 7th, 39 trains 33 at 1,000 + 6 at 300	34,800
March 8th, 39 trains 33 at 1,000 + 6 at 300	34,800
March 9th, 35 trains 29 at 1,000 + 6 at 300	30,800
March 10th, 26 trains 20 at 1,000 + 6 at 300	21,800
March 11th, 22 trains 16 at 1,000 + 6 at 300	17,800
March 12th, 23 trains 17 at 1,000 + 6 at 300	18,800
March 13th, 17 trains 11 at 1,000 + 6 at 300	12,800
Total ..	202,400

Letter No. C.-P. 708-503, dated Trichinopoly, the 23rd March 1909.

From—The Acting Chief Auditor, South Indian Railway Company (Limited),

To—The Collector of Tanjore.

In reply to your letter of 27th ultimo addressed to the Agent of this Railway, I have the honour to give you below the information asked for :—

Inward Passengers.

Date.	From the North.	From the South.
1st March 1909	1,036	1,938
2nd March 1909	7,325	5,525
3rd March 1909	11,409	10,815
4th March 1909	18,049	23,095
5th March 1909	35,087	25,216
6th March 1909	4,013	4,182
Total ..	76,919	70,771

Outward Passengers.

Date.	For the North.	For the South.
7th March 1909	14,967	13,445
8th March 1909	15,650	16,202
9th March 1909	13,393	11,808
10th March 1909	10,728	11,190
11th March 1909	6,349	7,234
12th March 1909	5,135	4,973
Total ..	66,222	64,852

Owing to the majority of passengers holding return tickets, it is impossible to give the correct number returning between the 7th and 12th, but I may say I deputed a responsible person to obtain the figures on the spot and they may be considered fairly reliable.

Letter No. 968-S, dated Camp, Ooty, the 1st April 1909.

From—Major W. W. Clemesha, M. D., D.Ph., I.M.S., Acting Sanitary Commissioner for Madras,

To—The Secretary to Government, Local and Municipal Department.

Forwarded. The sanitary arrangements were sufficient and satisfactory and I cannot think of any item that could have been improved upon. As regards the disinfection

of the Mahamakham tank, half a ton of chloride of lime was used for the six days, but this was in reality scarcely sufficient; I am not prepared to make any very dogmatic pronouncement as to its value, but having regard to the susceptibility of pathogenic organisms to the action of chlorine and hypochlorites, some good must have resulted. The liquor was always put in after sun-down, so as to allow the action to go on all night, and the edges of the tank should receive particular attention. This method is one that is capable of considerable development. The sanitary staff all worked very well.

ORDER—No. 832-M., DATED 22ND MAY 1909.

His Excellency the Governor in Council has read with great gratification the reports on the Mahamakham festival held at Kumbakonam from 25th February to 6th March 1909. The entire absence of any serious epidemic, accidents or crime, in sipte of the enormous concourse of people and the general public satisfaction that has been expressed with the arrangements for the festival, prove that those arrangements were sagaciously conceived and admirably carried out.

2. The thanks of Government are due to their officers generally and to the Municipal Councillors and Municipal Secretary for the successful accomplishment of the difficult task which it fell to their lot to carry out, and His Excellency in Council desires to express his appreciation of the work done by the following gentlemen in particular upon whom the principal burden of planning or supervising the arrangements fell: Mr. J. P. Bedford, the Collector and District Magistrate; Mr. A. F. G. Moscardi, the Sub-divisional Officer and Chairman of the Municipality; Major W. W. Clemesha, the Sanitary Commissioner; Mr. F. E. Morgan, the Sanitary Engineer; Mr. H. D. Robertson, Deputy Inspector-General of Police; Mr. N. E. Q. Mainwaring, Superintendent of Railway Police; Mr. F. B. M. Cardozo, Superintendent of Police; M. R. Ry. N. Krishnaswami Aiyangar Avargal, Vice-Chairman of the Municipal Council; M. R. Ry. I. Manikkavasaga Nadar Avargal, Deputy Superintendent of Police; and Police Inspectors P. Subbaiyar and K. S. Karpagavinayagam Pillai.

3. The Government also note with satisfaction the excellent arrangements made by the South Indian Railway for the management of the traffic.

4. The report as to the actual expenditure on the festival arrangements will be awaited.

(True Extract).

L. M. WYNCH,

Ag. Secretary to Government.

To the Collector of Tanjore.
,, Chairman, Municipal Council, Kumbakonam.
,, President, District Board, Tanjore.
,, Public Department.
,, Judicial Department.

Copy to J. P. Bedford, Esq., I.C.S.
,, A. F. G. Moscardi, Esq., I.C.S.
,, Major W. W. Clemesha, M.D., D.PH., M.R.C.S., L.R.C.P., I.M.S.
,, F. E. Morgan, Esq.
,, M. R. Ry. N. Krishnaswami Aiyangar Avargal
,, H. D. Robertson, Esq.
,, N. E. Q. Mainwaring, Esq.
,, F. B. M. Cardozo, Esq. — through the Judicial Department.
,, M. R. Ry. I. Manikkavasaga Nadar Avargal
,, ,, P. Subbaiyar
,, ,, K. S. Karpagavinayagam Pillai
,, the Agent, South Indian Railway.

THE TIRUVAIYARU ... SARASVATI MAHAL ...

G. M. Press, Simla.—No. 3 D.G.I.M.S.—22-1-16.—300.—B.A.

Government of Madras

LOCAL & MUNICIPAL DEPARTMENT (LOCAL)

G.O. No. 359-A L., 15th March 1919

Pilgrim Committee

Issuing a press communiqué regarding the action taken on the recommendations of the —.

Order—No. 359-A L., dated 15th March 1919.

The following press communiqué is issued regarding the action taken on the recommendations of the Pilgrim Committee :—

PRESS COMMUNIQUÉ.

The following information is published regarding the action taken up to date in respect of the recommendations of the committee appointed for this province by the Government of India to inquire into the possibility of improving the sanitary arrangements at pilgrim centres. The Government have already in their published Orders Nos. 1658 M., dated 21st September 1916, and 955 L., dated 2nd July 1917, dealt with certain recommendations of the committee regarding the arrangements for the health and convenience of travellers by rail; these matters comprised, among other topics, the accommodation of pilgrim passengers, facilities for booking, food, water-supply and conservancy, including the provision or improved cleanliness of sanitary arrangements on railway carriages; the conveyance by civil authorities to the Railway administrations of timely intimations as to the probable number of pilgrims travelling; the methods to be adopted in dealing with outbreaks of cholera and in giving warning of the appearance of the disease.

2. In the Government Order of 2nd July 1917 above quoted the suggestions of the committee regarding particular places of pilgrimage were reserved for considera tion in consultation with the local bodies concerned. The Government now desire to make public the progress so far attained. To assist in the various schemes the Government have made a grant of Rs. 3,36,250 to local bodies; it is proposed to distribute a further sum of Rs. 50,000 in the current year and Rs. 1 lakh next year.

3. A short summary of the recommendations of the committee with the action taken thereon is given below :—

I. Madura.—The committee made the following recommendations which are dealt with below seriatim :—

(1) The laying of water mains of considerable size, permanently and as near as possible to both banks of the river, for supply during the Chitrai festival and, until this is done, the laying of temporary mains and sinking tube-wells up to a depth of 12 or 15 feet in the bed of the Vaigai to supplement the supply.

The council opened out a deep well dug in the bed of the Vaigai in 1883 and pumped the water at the last festival to a temporary main laid in the bed of the river and supplied it to pilgrims through taps and stated that this arrangement would be continued till the water-works improvements now in progress are completed. The tube-wells of the kind suggested by the committee were tried in some places but proved a failure.

(2) The provision of water-supply to the mantapams and other places where the car halts during Chitrai festival and also to the cattle fair ground after selecting a permanent site for it.

The council has promised to consider this suggestion as soon as the water-works improvements are completed and an improved supply becomes available.

(3) The extension of the under-ground drainage system to the area near the bank of the river and the construction of water-carriage latrines on the south side of river ; until this is done, the enclosure of large spaces in the north bank of the river to serve as latrines and the trenching of night-soil in a corner of the enclosure.

For the underground drainage extension referred to, a provincial grant of Rs. 32,500 was made in 1918 and the council has promised to carry out the other improvements also.

(4) Widening and covering the overhead bridge at the railway station.

(5) The provision of additional third-class waiting sheds and construction of latrines in the compound of the railway station, these latrines and the latrine on the railway platform being connected to the underground sewers when the drainage works are completed.

These recommendations, (4) and (5), were commended to the attention of the Railway authorities.

(6) The conversion of the public latrines at the entrance to the railway station compound into a water-carriage latrine.

The council has promised to take steps when the drainage scheme has been completed.

(7) Supply of water in the endowed water-pandal in Mangammal choultry from the municipal water pipes instead of from a well near Pacuvumalai ; the conversion of the latrines attached to the several choultries in the town into water-carriage latrines and the regular cleaning and whitewashing of the choultries twice a year.

These are matters for the owners of the choultries, but the council has promised to do its best to see that effect is given to them.

(8) The exercise of control over eating-houses.

The council has promised to carry out this suggestion but the licensing of these places must await the revision of the Municipal Act.

(9) The cleaning of the Pottamarai tank regularly as at present and keeping down the growth of all vegetation in Yellugadal tank.

The council has promised to take the necessary action. It has also addressed the Director of Fisheries to inspect the tanks and suggest means for preventing the breeding of mosquitoes.

(10) The construction of an infectious diseases hospital.

The council has converted the drainage pumping station into an infectious diseases hospital and this hospital has been handed over to Government with the headquarters hospital under recent orders.

II. Tirupparankunram, (*Madura district*).—The following suggestions were made by the committee :—

(1) That the union should provide two wells (the Sanyasi well and the Sotukadai well) with pumps, overhead tanks and taps in order to obviate the danger of pollution of wells. The taluk board has arranged to improve the Sotukadai well.

(2) That the water in the boring made by the Industrial department in the rock near the temple should be examined chemically and bacteriologically and, if found fit for drinking purposes, the work should be completed at an early date. The taluk board has arranged to instal a pump in the borehole.

(3) That in phenomenally dry years the tank which feeds the wells in the town by percolation should be filled from the Periyar irrigation canal. The taluk board president stated that this suggestion had already been made by him and that steps would be taken to secure a supply of water to the tank in February every year.

(4) That trees should be more extensively planted to give shade to the pilgrims. The taluk board president stated that the union chairman would be instructed to arrange for the planting of trees round the Girividhi after the settlement of the dispute as to the right to the street between the Devasthanam and the Government on behalf of local funds.

III. Alagarkoil (Madura district).—The committee proposed—

(1) That a small water-supply installation should be provided for supplying the temple compound and the road leading to it with water from the Periyar channel. The taluk board considered the suggestion expensive and unworkable and suggested an investigation of the possibility of improving the supply of water from the springs up the hills. The question of improving the water-supply has been referred to the Sanitary Engineer for investigation.

(2) That the number of sweepers and scavengers should be increased considerably, that rubbish should be removed to the outskirts of the enclosure and burnt and that a few movable latrines should be provided. The taluk board reported that the matter had already been brought to the notice of the temple authorities. The district board has been asked to press the temple authorities to carry out their duties in this respect at least during festivals.

(3) That the mantapams in which the pilgrims were accommodated should be improved and that skilled advice should be taken as to the safety of some of the buildings. The taluk board desired the temple authorities to take action, but it is reported that the matter is one for the private owners of the mantapams. The Government have desired the taluk board to ascertain who these are and to try to get the necessary repairs effected.

(4) That the sanitary arrangements in the temple should be improved. The taluk board was of opinion that the temple committee should take the necessary action: it has been advised to take action under the Local Boards Act to compel the temple authorities to improve the sanitary condition of the temple premises.

(5) That vendors of food at festivals should be compelled to protect their goods from flies by wire-gauze and net work covers. The taluk board has not reported on the action finally taken.

IV. Rāmēswaram (Ramnad district).—The recommendations of the committee—

(1) That a capable sanitary officer for both Rāmēswaram and Dhanushkodi with assistants and a staff of sweepers and scavengers should be employed. The Government sanctioned the employment of a health officer in May 1918 agreeing to pay half the cost. The health officer has been employed from 3rd August 1918.

(2) That lodging houses and choultries should be licensed and made to conform to certain standard requirements regarding accommodation, sanitation, etc., and that the licensees should be required to report to the sanitary officer all cases of death or serious illness. The question awaits the amendment of the Local Boards Act in which it is proposed to provide the requisite powers.

(3) That particular care should be taken to treat cases of cholera, if possible, that patients should be detained for some days after recovery and that it should be made a rule that the Sanitary Commissioner should be specially informed by the health officer or union chairman of cases where parties attacked by cholera travel from place to place. No special orders were passed by the Government apart from their approval of the general measures already referred to.

(4) That useless wells breeding mosquitoes should be filled up with sand or adequately protected as an anti-malarial measure. The district board president reported that all unused wells at Rāmēswaram were closed and that the railway authorities were taking steps to fill up borrow pits.

(5) That the conservancy plant and staff should be increased and that proper supervision should be exercised over sanitary arrangements. The taluk board president reported that the permanent sanitary staff was sufficient, that temporary sweepers and scavengers were employed during festivals and that the private scavenging system had been in force from 1917.

(6) That increased accommodation for in-patients should be provided in the hospital. The Government sanctioned a grant of Rs. 12,000 for the construction of a general ward and Rs. 4,500 for an isolation ward. The work has been commenced.

(7) That an additional waiting shed should be provided in the railway station and arrangements should be made for the running of an early train leaving Rāmēswaram for Dhanushkodi before 6 a.m. and returning before noon. The Agent of the South Indian Railway reported that the remarks of the committee were noted

and that the early train which was originally running was not well patronised and consequently, except on special occasions of festivals, a train is run daily from Dhanushkodi to the Point after 7-30 a.m.

V. Dhanushkodi.—The committee proposed—(1) That houses in the hamlets of the village should be acquired and pulled down and the sites laid out on sanitary lines. The district board president suggested that as a proper plan of the union was essential to the framing of proposals the question might lie over till the union was surveyed. The Board of Revenue reported that the survey of the union was in progress and that it would be completed during 1918–19.

(2) That the choultry maintained by the Nattukkottai Chettis should be licensed. The question awaits the amendment of the Local Boards Act as no action can be taken under the existing law.

(3) That the advisability of obtaining a supply of water from the mainland should be considered if Dhanushkodi grew considerably. This does not call for any action at present. The contingency contemplated has not yet arisen.

(4) That a well-equipped dispensary should be provided at an early date. The Government have sanctioned the opening of a dispensary and agreed to pay the entire cost of the institution for the first year and half the cost for the following years. The dispensary was opened on 1st June 1918.

VI. Tiruchendur (Tinnevelly district).—The proposals of the committee—(1) That some permanent shelters should be erected near the temple with provision for drinking water-supply in the neighbourhood. The taluk board president stated that the erection of four shelters with latrines would be sufficient for the present. A grant of Rs. 18,800 has been given by Government for the purpose.

(2) That a protected water-supply should be provided. The taluk board president, the union chairman and the Tahsildar considered the committee's scheme to be costly and unnecessary. The district board president stated that steps were being taken to provide more wells and a grant of Rs. 8,000 has been sanctioned for the purpose by Government.

(3) That the number of private latrines should be increased, that they should all be conserved by the union and that conservancy lanes should also be provided. The taluk board president reported that efforts to open conservancy lanes by private negotiation proved unsuccessful, and that Rs. 1,000 would be required for opening the lanes. The Government have sanctioned a grant of Rs. 3,200 for the construction of latrines and Rs. 1,000 for opening conservancy lanes.

(4) That there should be one sanitary inspector for each taluk. The district board president reported that a temporary sanitary inspector would be employed every year during the Masi festival and cattle fair.

VII. Alwartirunagari (Tinnevelly)—Proposals—(1) That bridges should be constructed over one of the main channels from the Tambaraparani. It was reported that the taluk board and the Executive Engineer considered the bridges unnecessary but the Government declined to accept the view that the local bodies had no responsibilities in the matter. The district board has been asked to apply for grants after estimates were duly sanctioned.

(2) That a branch dispensary should be established. The district board and the taluk board submitted proposals for the opening of a dispensary and this was sanctioned by Government. The dispensary was opened in 1918.

(3) That the town should be extended and the congested areas opened up. Proposals from the local boards in this regard are awaited.

VIII. Palni.—The Chairman proposed—(1) The provision of a protected water-supply. The plans and estimates for a scheme estimated to cost Rs. 4,06,000 were prepared by the Sanitary Engineer. But on the advice of the Chief Engineer the Sanitary Board has in its proceedings of 8th May 1918 directed the Sanitary Engineer to investigate a gravitation scheme from the Varattar river. A grant of Rs 4,500 has been given in G.O. No. 1269 M., dated 7th August 1918, for the investigation of this scheme.

(2) The provision of a latrine of a permanent nature for each of the matams where pilgrims halt, the whitewashing of the matams, and the provision of taps when the water-supply scheme has been introduced. The council will endeavour to get these improvements effected by the owners of the matams.

(3) The removal of the public latrines situated within the catchment area of the main tank and erection of latrines at other sites instead.

The council has not reported what action it has taken or proposes to take in the matter.

(4) The fencing of the processional path round the temple at the top of the hill by the temple authorities. The council will endeavour to get this carried out by the temple authorities.

IX. Srirangam (*Trichinopoly district*).—The committee recommended—

(1) Provision of protected water-supply.

(2) An early start of the drainage scheme and provision of conservancy lanes along the backyards of houses.

(3) Improvement and enlargement of the Indian refreshment room at the Trichinopoly junction station.

The scheme for the provision of protected water-supply is estimated to cost Rs. 3·25 lakhs. Its investigation is in progress. The drainage scheme is estimated at Rs. 1·87 lakhs. This awaits the completion of the conservancy lanes now in progress. As regards the improvement of the Indian refreshment room at Trichinopoly junction station, orders have been deferred pending the receipt of a further communication promised by the Government of India.

X. Kumbakonam (*Tanjore district*).—The committee recommended—

(1) Cleaning of the Mahamakham and Pottamarai tanks in April 1920.

(2) Stoppage of the flow of water in the Cauvery and the Arasalar and sinking of tube wells down their banks during Mahamakham festivals.

(3) Removing the dilapidated buildings at the south-east corner of the Mahamakham tank with the object of increasing the amount of open space at this place.

(4) Opening out a second road from the railway station to the Mahamakham tank.

(5) Sinking a second borehole near the Mahamakham tank.

(6) Provision of two special arrival stations for pilgrims during the Mahamakham festival.

(7) Provision of more temporary sheds for the accommodation of pilgrims during Mahamakham festival.

The council has promised to consider recommendations (1), (2) and (7). A grant of Rs. 14,100 has been made in July 1918 for carrying out recommendation (3). With reference to recommendation (4) the council has already taken steps to acquire the necessary land. The sinking of a second borehole near the Mahamakham tank [recommendation (5)] is in progress with the help of a provincial grant of Rs. 11,250 and an equal amount of loan advanced to the council by the Government. As regards recommendation (6) the chairman has stated that the attention of the Railway authorities will be drawn thereto.

XI. Chidambaram (*South Arcot district*).—The committee recommended—

(1) Provision of cholera sheds near the hospital.

(2) Provision of a latrine for Thandava Chetti's chatram and improvement of the condition of the chatrams and matams. A grant of Rs. 5,000 has been given to the council for carrying out the first recommendation.

The second has been commended to the council's attention.

XII. Conjeeveram (*Chingleput district*).—The committee made the following recommendations—

(1) Improvement of water-supply ;

(2) Improvement of temple tanks by restoring the Lala Kalva system and closure of Mangala Thirtham ;

(3) Licensing coffee hotels; and

(4) Construction of sheds for the accommodation of pilgrims.

(1) With regard to (1) the Sanitary Board recommended in July 1915 for the sanction of Government plans and estimates amounting to Rs. 2,14,000 for improving the water-supply. As the council was not in a position to finance the scheme, the Sanitary Engineer made alternative and cheaper proposals for the improvement of the supply. Estimates for these in detail have been sanctioned and a grant has been made to the council of the whole estimated cost.

(2) In regard to (2) several schemes were suggested in 1916 for improving the temple tanks and Mangala Thirtham. It does not appear however that the benefits conferred by the schemes would be proportionate to the expense involved and the council has been advised to take measures to prevent the surface drainage from entering the tanks and to take such steps as were feasible to ensure their cleanliness for bathing purposes.

(3) With reference to (3) the council stated that coffee hotels where articles made of flour are sold are licensed.

(4) As regards (4) the council objected that it would be very expensive to put up either temporary or permanent sheds.

XIII. Tiruvannāmalai (*North Arcot district*).—The committee made the following recommendations—

(1) Construction of a permanent and central cholera shed;

(2) Improvement of water-supply;

(3) Construction of temporary sheds for the accommodation of pilgrims;

(4) Licensing of coffee hotels; and

(5) Filling of the tank opposite the waiting shed in the railway station.

(1) With regard to (1), the Government have sanctioned a grant of Rs. 5,000 to the council for the purpose.

(2) In regard to (2), a minor water-supply scheme called the Kalyani well scheme has been completed and brought into use with the aid of a grant of Rupees 13,800 from Provincial funds. The investigation of a major scheme (Samudram valley scheme) has been completed; but a report from the Sanitary Engineer is awaited.

(3) As regards (3), the council stated that it was not in a position to put up the sheds and that the temple trustees likewise declared themselves unable to do so but have undertaken to keep the thousand-pillar mantapam well-cleansed and lighted.

(4) With reference to (4), the council has ordered that licences should be taken for coffee hotels.

(5) With regard to (5), the council stated that the Railway Agent was addressed on the subject but that his reply was not received; and it proposed to use the powers conferred on it by section 156 (2) of the Madras District Municipalities Act.

XIV. Velanganni (*Tanjore district*).—The recommendations were—

(1) There should be proper apportionment of accommodation for the different classes of pilgrims; the land near the beach and the garden behind the church should be reserved for the erection of small bungalows, the open pakka sheds and the additional grass sheds being kept entirely for the beggar class. There should be better supervision of the cleanliness of the sheds and their surroundings.

(2) The sweeper establishment must be properly supervised and better arrangements should be made for the rapid removal of night-soil round the camp.

(3) The pumps fitted to wells should be in working order and maintained efficiently throughout the festival though they may be removed after the festival.

(4) The question of opening a flag station at Andanapet in order to divert the pilgrims from going into Negapatam should be considered.

As regards the first three recommendations the taluk board president stated that adequate steps were taken to provide proper accommodation, good water, conservancy and other sanitary arrangements and that the pumps were fitted to wells

only during the festival and that they were in good order. The Government drew his attention to the committee's statement that the arrangements for sanitary supervision at Velanganni were not adequate. As regards the last recommendation, the Agent, South Indian Railway, reported that the suggestion would be considered by him.

XV. Nagore in the Negapatam municipality (*Tanjore district*).—The committee recommended—

(1) Provision of accommodation of a public nature especially near the railway station,

(2) Provision of more public latrines in carefully selected areas,

(3) Provision of more stand-posts and water taps in the square in front of the durga,

(4) Provision of a sewerage scheme at the earliest possible moment, and

(5) Construction of a permanent cholera shed.

No specific action has been taken by the council in regard to recommendation (1). As regards recommendations (2), (3) and (5) grants of Rs. 2,046, Rs. 1,375 and Rs. 8,835, respectively, have been given from the Imperial grant of one lakh for improvements to pilgrim centres. In view of the difficulty in getting stoneware pipes and of the inability of the council to finance an underground sewerage scheme (item 4) which alone was considered suitable by the expert advisers to Government, the council has been informed that a drainage scheme cannot be carried out now and advised to adopt temporary arrangements for mitigating the nuisance by replacing the existing cess-pits by soakage pits.

XVI. Udipi, South Kanara district.—The recommendations of the committee were—

(1) The employment of a sanitary inspector with a large staff of scavengers and sinking wells.

(2) The employment of an additional medical officer (sub-assistant surgeon) in the local fund hospital at the place.

The proposals under the first head were accepted by the taluk board; as regards the second, it desired, while employing an additional sub-assistant surgeon, to set free periodically the assistant surgeon in charge to tour in the adjoining villages. Its proposals in this regard could not be approved as they involved leaving an important institution in sole charge of a sub-assistant surgeon.

XVII. Tirupporur (*Chingleput district*).—The committee proposed—

(1) To provide additional wells for drinking water-supply. The district board president has been asked to submit a report to Government on the question of sinking additional wells after the opinion of the District Board Engineer was obtained.

(2) To remove silt from the tank close to the temple in the hot weather instead of a fortnight before Brahmotsavam. The trustee of the temple has been advised to give effect to the suggestions.

(3) To make adequate conservancy arrangements during important festivals. The taluk board president has promised to do so.

(4) To add a cholera shed to the dispensary. The district board president has undertaken to do this as soon as possible.

XVIII. Tirupati (*Chittoor district*).—The committee made the following recommendations :—

(1) Construction of a cholera hospital close to the main hospital,

(2) Licensing and control of lodging houses when the Act is amended,

(3) Pushing on the improvements to the water-works to increase the supply,

(4) Improvement of drainage,

(5) Improvement of the conservancy work and staff, and

(6) Enlargement of the railway station to provide increased accommodation for passengers.

(1) *Construction of a cholera hospital.*—The Government have sanctioned a grant of Rs. 5,000 for this work.

(2) *Licensing of lodging-houses.*—No action has been taken pending the amendment of the Act.

(3) *Improvements to water-supply.*—These have been completed at a cost of Rs. 2,42,000 towards which the Government contribution amounted to Rs. 1,64,600.

(4) *Improvement of drainage.*—The Government have requested the Sanitary Engineer to prepare approximate plans and estimates for a drainage scheme and have informed the council that the question of financing the work will be considered when the cost is ascertained. The plans and estimates have not yet been received from the Sanitary Engineer.

(5) *Improvement to the conservancy work and staff.*—The council proposed to defer the question until the levy of a pilgrim tax should be sanctioned. This tax not being at present legally leviable, it has since submitted proposals for strengthening the staff and has applied for a recurring grant of Rs. 2,020 from provincial funds for meeting the cost. The question is under consideration.

(6) *Enlargement of the railway station.*—The chairman stated that the Agent, Madras and Southern Mahratta Railway, would be requested to take immediate steps to enlarge the passengers' shed. Nothing further has been heard from the council on the subject.

XIX. Tiruchanur (Chittoor district).—The committee proposed to improve the sanitation of the place by including it in the Tirupati municipality; and also recommended that a good protected filtered water-supply should be provided; and that greater care should be taken in removing the weeds from the large bathing tank and that water should be supplied to the tank as now from the spring, but through a pipe instead of through an open channel. The local authorities were opposed to the first measure. The question of improving the water-supply was referred for examination to the Sanitary Engineer while the attention of the local authorities was specially drawn to the recommendations of the committee in regard to the cleaning of the tank and the supply of water to it through a masonry pipe. The Sanitary Engineer's report has been received and is under consideration. From the Imperial grant of one lakh an allotment of Rs. 4,000 was made for the provision at the place of a protected well with kite motion pump.

XX. Tirumalai (Chittoor district).—The committee recommended the improvement of water-supply, the provision of accommodation for pilgrims and the conversion of step-wells into draw-wells. The Mahant of Tirupati and his peishkar have promised to do what is required.

XXI. Kalahasti (Chittoor district).—The recommendations of the committee were—

(1) *Improvement of water-supply.*—The Government have directed the Sanitary Engineer to inspect and advise. His report has been received and is under consideration.

(2) *Accommodation for pilgrims.*—The taluk board president promised to take up the question of building a choultry for all castes and also to allow pilgrims to put up temporary sheds.

(3) *The construction of a bridge across the Swarnamukhi river.*—The question had to be deferred on account of expense.

(4) *Improvement of conservancy arrangements.*—The taluk board president reported that steps would be taken to prevent pilgrims from encamping in the river bed and also proposed to appoint a sanitary inspector for the union. The Government have directed that there should be an adequate and efficient sanitary staff at festival times. A grant of Rs. 4,000 from the amount of one lakh allotted by the Government of India was made for the provision of a protected well at the place with kite motion pump.

(True extract)

H. G. STOKES,
Acting Secretary to Government.

To the Superintendent, Government Press.
Editors' Table.